

DANIEL DIANCHEN GANG, Ph.D., P.E., F. ASCE

ASCE Fellow

UL Distinguished Professor of Environmental Engineering
Director of the Center of Environmental Engineering and Protection (CEEP)
BORSF Endowed Professor in Water Studies
SLEMCO/LEQSF Regents Endowed Professor in Engineering
Phillip J. Burguières/BORSF Endowed Professor in Engineering
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EDUCATION

- Ph.D.** Civil & Environmental Engineering 2001, University of Missouri, Columbia, MO
(Advisors: Dr. Shankha Banerji, Dr. Tom Clevenger. Dissertation: “Modeling of the THM and HAA formation in Missouri Waters upon Chlorination.”)
- M.S.** Civil & Environmental Engineering 1999, University of Missouri, Columbia, MO
(Advisors: Dr. Shankha Banerji, Dr. Tom Clevenger. Dissertation: “Chromium(VI) Removal by Modified PVP Coated Silica Gel.”)
- M.S.** Fine Chemical Engineering 1988, Huazhong University of Science and Technology (HUST), Wuhan, China.
- B.S.** Chemistry & Chemical Engineering 1985, Henan University, Kaifeng, China

ACADEMIC EXPERIENCE

Current

- 2013–present **Director**, [Center for Environmental Engineering Protection \(CEEP\)](#),
University of Louisiana at Lafayette, Lafayette, LA
- 2012–present **Full Professor**, Dept. of Civil Engineering, University of Louisiana at
Lafayette, Lafayette, LA

Previous

- 2011–2021 **Graduate Coordinator**, Dept. of Civil Engineering, University of
Louisiana at Lafayette, Lafayette, LA
- 2007–2012 **Associate Professor (with tenure)**, Dept. of Civil Engineering, University
of Louisiana at Lafayette, Lafayette, LA
- 2006–2007 **Associate Professor (with tenure)**, Dept. of Civil Engineering, West
Virginia University Institute of Technology, Montgomery, WV
- 2003–2006 **Assistant Professor**, Dept. of Civil Engineering, West Virginia University
Institute of Technology, Montgomery, WV

- 2001–2003 **Research Assistant Professor**, Civil and Environmental Engineering Department, University of Missouri, Columbia, Missouri
- 1997–2001 **Graduate Research Assistant**, Civil and Environmental Engineering Department, University of Missouri, Columbia, Missouri
- 1988–1997 **Instructor, Assistant Professor, Associate Professor**, Wuhan Institute of Technology (WIT), Wuhan, P. R. China

Guest Professorship:

- 2011 – 2014 Adjunct Professor, School of Chemical Engineering and Pharmacy, Wuhan Institute of Technology (WIT), Wuhan, P. R. China,

AWARDS AND HONORS

- 2025 Outstanding Achievement in Innovation, presented by the President of the University of Louisiana at Lafayette
- 2025 SLEMCO/BORSF Professorship in Engineering, University of Louisiana at Lafayette, Lafayette, LA
- 2025 Advance Leaf Award, presented by the Student Center for Research, Creativity and Scholarship, UL Lafayette
- 2024 Certificate of Achievement in Innovation, presented by the President of the University of Louisiana at Lafayette
- 2024 BORSF Endowed Professor in Water Studies, University of Louisiana at Lafayette, Lafayette, LA
- 2024 Fastest Grader Award, presented by the UL ASCE chapter president.
- 2023 Phillip J. Burguires/BORSF Endowed Professor of Engineering, University of Louisiana at Lafayette, Lafayette, LA
- 2023 Best Field Trips, Presented by the UL ASCE chapter president.
- 2022 SLEMCO/BORSF Professorship in Engineering, University of Louisiana at Lafayette, Lafayette, LA
- 2022 Fellow, American Society of Civil Engineering (ASCE)
- 2022 Certificate of Achievement in Innovation, presented by the President of the University of Louisiana at Lafayette
- 2021 LEF Engineering Faculty Professionalism Award, Louisiana Engineering Foundation
- 2021 BORSF Endowed Professor in Water Studies, University of Louisiana at Lafayette,
- 2020 Outstanding Master's Mentor Award, presented by the President of the University of Louisiana at Lafayette

- 2020 Phillip J. Burguires/BORSF Endowed Professor of Engineering, University of Louisiana at Lafayette, Lafayette, LA
- 2019 Distinguished Professor Award, presented by the President of the University of Louisiana at Lafayette
- 2019 SLEMCO/BORSF Professorship in Engineering, University of Louisiana at Lafayette, Lafayette, LA
- 2018 BORSF Endowed Professor in Water Studies, University of Louisiana at Lafayette, Lafayette, LA
- 2018 Certificate of Achievement in Innovation, presented by the President of the University of Louisiana at Lafayette
- 2017 Research Excellence Award, presented by the President of the University of Louisiana at Lafayette
- 2017 Senior Faculty Researcher of the Year, College of Engineering, University of Louisiana at Lafayette, Lafayette, LA
- 2017 Certificate of Achievement in Innovation, presented by the President of the University of Louisiana at Lafayette
- 2016 Certificate of Achievement in Innovation, presented by the President of the University of Louisiana at Lafayette
- 2016 SLEMCO/BORSF Endowed Professor in Engineering II, University of Louisiana at Lafayette, Lafayette, LA
- 2016 SLEMCO/BORSF Endowed Professor in Engineering I, University of Louisiana at Lafayette, Lafayette, LA
- 2016 ACS Publications Award. Certificate of Recognition. American Chemical Society
- 2015 Inducted into Phi Kappa Phi Honor Society
- 2014 Phillip J. Burguires/BORSF Endowed Professor of Engineering, University of Louisiana at Lafayette, Lafayette, LA
- 2013 Certificate of Achievement in Research & Sponsored Activities, presented by the President of the University of Louisiana at Lafayette
- 2013 Research Enhancement Award, NASA/ Louisiana Space Consortium
- 2013 SLEMCO/BORSF Endowed Professor in Engineering II, University of Louisiana at Lafayette, Lafayette, LA
- 2013 SLEMCO/BORSF Endowed Professor in Engineering I, University of Louisiana at Lafayette, Lafayette, LA
- 2011 Phillip J. Burguires/BORSF Endowed Professor of Engineering, University of Louisiana at Lafayette, Lafayette, LA

- 2011 Research Enhancement Award, NASA/ Louisiana Space Consortium
- 2010 Who's Who in the American; Marquis Publishers
- 2010 SLEMCO/BORSF Endowed Professor in Engineering II, University of Louisiana at Lafayette, Lafayette, LA
- 2010 Honorary Visiting Professorship, Wuhan Institute of Technology, P. R. China
- 2010 Chu Tian Scholar, Hubei Province, P. R. China
- 2009 Research Enhancement Award, NASA/ Louisiana Space Consortium
- 2009 Distinguished Honorary Professor, Wuhan Institute of Technology, P. R. China
- 2007 SLEMCO/BORSF Endowed Professor in Engineering II, University of Louisiana at Lafayette, Lafayette, LA
- 1999 Science and Technology Development Award of Hubei Province, P. R. China
- 1995 Teaching Excellent Award, Wuhan Institute of Technology, P. R. China

MEDIA COVERAGE

Commentaries on environmental issues and coastal restoration in Discovery Channel Canada, FOX 8, KATC3, The Daily Advertiser, La Louisiana Magazine, and Fast Company Magazine.

- 2025 [Dr. Gang is recognized for Outstanding Achievement in Innovation at UL](#)
- 2024 [Dr. Gang is recognized for Outstanding Achievement in Innovation at UL](#)
- 2022 [Dr. Gang is honored as ASCE Fellow](#)
- 2022 [Dr. Gang spotlighting in UL news](#)
- 2021 [Dr. Gang's team spotlighting in UL College Engineering news](#)
- 2020 [Dr. Gang is named outstanding master's mentor](#)
- 2019 [Dr. Gang is featured in the Louisiana Magazine](#)
- 2019 [Dr. Gang is filmed at the UL Eminent Faculty Awards Events](#)
- 2019 [Dr. Daniel Gang spotlighting in UL Lafayette news as one of the two 2019 Distinguished Professor](#)
- 2019 [Dr. Daniel Gang is a Distinguished Professor Award Recipient](#)
- 2019 [Dr. Daniel Gang is recognized by University of Louisiana Foundation](#)
- 2017 Dr. Gang in News 15: [UL Grad Students Working On Device to Fight Coastal Erosion](#)
- 2015 [The Homespun Tech That's Helping to Shore up Louisiana's Disappearing Coastline.](#)
- 2015 [UL researcher teams with industry to save the coast.](#)

- 2015 Discovery Canada's show "Daily Planet" features the coastal restoration project. <http://www.discovery.ca/Video?vid=536298>
- 2015 [Discovery Channel Canada documented Dr. Gang's Coastal Restoration Research Project.](#)
- 2014 Dr. Gang Spotighting in KLFY news: [Discovery Channel Canada to feature UL Lafayette engineering project.](#)
- 2014 [Dr. Gang Spotighting in the Daily Advertiser](#)
- 2013 [Dr. Gang's research team helps prepare Wave Robber for commercial application](#)
- 2013 [Dr. Gang in the La Louisiana magazine.](#)
- 2011 Dr. Gang was on KATC3 TV news on August 9th, 2011 commenting on mercury control technology for coal-fired power plants. <http://www1.katc.com/news/upgrades-could-cost-lus-millions-raise-electric-prices/>

RESEARCH GRANTS

- 2025-2028 “Efficient Tellurium (Te) Extraction and Recovery from End-of-Life Cadmium-Tellurium (CdTe) Photovoltaic (PV) Modules and Effluent Waste Streams Using Specially Tuned Functional Adsorbent.” Louisiana Board of Regents Support Fund (BoRSF), ITRS Program. Total budget- \$788,928. LEQSF (2025-2028)-RD-B-04. PI: D. Gang
- 2025-2027 “Lithium Capture System from Oil and Natural Gas Production Waters and Other Lithium-Bearing Brine Waters.” Louisiana Energy Technology Commercialization Program. Total budget- \$339,618. PI: D. Gang
- 2025-2025 “Fenton’s Oxidation Process Optimization for Tellurium (Te) Leaching from End-of-life (EoL) CdTe PV Solar Panels.” UL Lafayette, Advanced Faculty Undergraduate Support Grant. Total budget: \$5,000. PI
- 2024-2024 “Advanced Oxidation Process (AOP) Optimization for Tellurium (Te) Leaching and Recovery from End-of-Life (EoL) PV Solar Panels.” UL Lafayette, Advanced Faculty Undergraduate Support Grant. Total budget: \$2,000. PI
- 2023-2026 “Extraction of Lithium from Oilfield Produced Water Using Nano-scale Mesoporous Lithium Ion-Sieves (NSMLIS).” Louisiana Board of Regents Support Fund (BoRSF), ITRS Program. Total budget- \$555,306. LEQSF (2023-2026)-RD-B-04. PI: D. Gang
- 2021-2024 “Gulf Research Program Early-Career Research Fellowship, Environmental protection and stewardship track”. National Academies of Sciences (NAS), Engineering and Medicine. Total budget: \$76,000. Senior Mentor.
- 2020-2022 “Acquisition of FTIR Microscope for Advancement in Chemical Materials, and Biological Science Research and Education.” Louisiana Board of Regents, Total budget: \$85,303. Co-PI

- 2019-2022 “Acquisition of Focused Ion Beam-Scanning Electron Microscope for the Multidisciplinary Research and Education at the University of Louisiana at Lafayette.” National Science Foundation (NSF) Major Research Instrumentation (MRI), Total budget: \$1,425,129. Major Role (4%)
- 2018-2022 “Production of Hydrogen and Other Life Support Products using Wastewater as a Feed into a Space-based Biochemical Conversion System (BIOSYS).” NASA EPSCoR-BoRSF, Total budget, \$2,200,000. Account numbers: 340165, 360199. Co-PI.
- 2018-2022 “REU Site: Research Experience for Undergraduates in Advanced Infrastructural Materials” National Science Foundation (NSF). Research Experience for Undergrads Program (REU). Total budget, \$357,012. Senior Personal, faculty mentor. NSF-1757786
- 2020-2020 “Anaerobic Digestion of Waste Products into Power and Value-Added Products.” CLECO Inc. Total budget, \$324,201. Grant: G00000210 Fund: 370003 Co-PI: D. Gang (10%)
- 2019-2019 “Anaerobic Digestion of Waste Products into Power and Value-Added Products.” CLECO Inc. Total budget, \$324,201. Grant: G00000210 Fund: 370003 Co-PI: D. Gang (10%)
- 2018-2021 “GAMC Novel Adsorbent Development for BTEX Removal from Hydraulic Fracturing Flowback Water”. Louisiana Board of Regents Support Fund (BoRSF), PoCP Program. Total budget, \$56,513. LEQSF(2018-20)-RD-D-06. PI: D. Gang (100%)
- 2018-2021 “REU Site: Healthy Streams, Healthy Coasts: An Interdisciplinary Approach to Watershed Science and Education.” National Science Foundation (NSF). Research Experience for Undergrads Program (REU). Total budget, \$287,985. Senior Personal, faculty mentor.
- 2018-2019 “Evaluation of switch grass filter socks to mitigate pollution resulting from highway storm water and construction runoff.” Louisiana Transportation Research Center (LTRC), TIRE program. Total budget, \$39,018. Account number: 360174: Co-PI: D. Gang (35%)
- 2018-2022 “Graduate Fellowships in Systems Engineering Focusing on Smart Engineering System” BoR Traditional Graduate Fellows Program. Total budget: \$120,000. Co-PI: D. Gang (10%)
- 2010-2018 “Anaerobic Digestion of Waste Products into Power and Value-Added Products.” CLECO Inc. Total budget, \$1,833,259. Grant: G00000210 Fund: 370003 Co-PI: D. Gang (10%)
- 2017-2021 “Graduate Fellowships in Systems Engineering Focusing on Lean Six Sigma Research” BoR Traditional Graduate Fellows Program. Total budget: \$120,000. Co-PI: D. Gang (10%)

- 2016-2018 “Functionalized Mesoporous Sorbents Development for Hydraulic Fracturing Flowback Water Treatment”. Louisiana Board of Regents Support Fund (BoRSF), P-fund Program. Total budget, \$30,785. LEQSF(2016-17)-RD-C-15. PI: D. Gang (100%)
- 2016-2017 “Acquisition of an X-ray Diffractometer for Research and Training in Oil and Gas Exploration and Materials Evaluation”. Louisiana Board of Regents Support Fund (BoRSF), Traditional ENH Program. Total budget, \$138,359. Co-PI: D. Gang (20%)
- 2016-2020 “Recruiting PhD Students in Emerging Research Areas of Systems Engineering” BoR Traditional Graduate Fellows Program. Total budget: \$120,000. Co-PI: D. Gang (10%)
- 2015-2016 “Acquisition of Adsorption Analyzer for Hydraulic Fracturing Flowback Water Treatment Education and Research”. Louisiana Board of Regents Support Fund (BoRSF), Traditional ENH Program. Total budget, \$66,488. LEQSF(2015-16)-ENH-TR-32. PI: D. Gang (100%)
- 2015-2019 “Recruiting Superior Ph.D. Students in Systems Engineering” BoR Traditional Graduate Fellows Program. Total budget: \$240,000. Co-PI: D. Gang (10%)
- 2014-2015 “Field Investigation of the Wave Suppressor Sediment Collection (WSSC) System”. National Science Foundation (NSF). Total budget- \$44,724. PI: D. Gang (100%) LEQSF-EPS(2014)-OPT-IN-36
- 2013-2017 “Field Investigation of the Wave Suppressor Sediment Collection (WSSC) System, a Highly Effective System for Shoreline Protection and Sediment Retention”. Louisiana Board of Regents Support Fund (BoRSF), ITRS Program. Total budget- \$292,052. LEQSF (2013-2017)-RD-B-04. PI: D. Gang (100%)
- 2013-2015 “Development and Evaluation of Nano-Scaled Mesoporous Sorbents for Space Environmental Control and Life Support System (ECLSS)”. National Aeronautics and Space Administration (NASA). Total budget- \$70,237. PI: D. Gang (100%) NNX10A140H
- 2012-2015 “Non-Rock Alternatives to Shoreline Protection”, USDA-NRCS LA-16 Non-Rock Alternative, subcontractor to JESCO ENVIRONMENTAL. Total Budget, \$955,426.24. Co-PI: Dr. Gang (30%).
- 2012-2014 “Coastal Protection and Restoration Field Study Using Wave Suppressor Sediment Collection (WSSC) System”. National Science Foundation (NSF). Total budget- \$52,092. PI: D. Gang (100%) LEQSF-EPS(2012)-OPT-IN-17
- 2011-2014 “Modular Sediment Retention and Shoreline Protection Structure”. Louisiana Board of Regents Support Fund (BoRSF), ITRS Program. Total

- budget- \$267,206. LEQSF (2011-14)-RD-B-07. PI: D. Gang (100%)
- 2011-2012 “Development of Novel Adsorbents for Space Lightweight Contingency Water Recovery Systems (LWC-WRS)”. National Aeronautics and Space Administration (NASA). Total budget- \$60,129. PI: D. Gang (100%). NASA(2011)-DART-47
- 2010-2012 “Fusion Splicer for the Development of a Multidisciplinary Optical Fiber Program at UL Lafayette”. Louisiana Board of Regents Support Fund (BoRSF), Traditional ENH Program. Total budget, \$46,500. Co-PI: D. Gang (20%)
- 2009-2011 “Development of Nano-Scale Mesoporous Sorbents for Space Water Recovery Systems (WRS)”. National Aeronautics and Space Administration (NASA). Total budget- \$63,670. PI: D. Gang (100%) NASA/LEQSF (2005-2010)-LaSPACE
- 2009-2010 “Extending the Optical Fiber Technology into Oil and Natural Gas Wells”. Louisiana Board of Regents Support Fund (BoRSF), Traditional ENH Program. Total budget, \$58,816. Co-PI: D. Gang (20%)
- 2008-2010 “Removal of Selenium (Se) from Coal Mine Wastewater by GAC-Based Iron-Containing Adsorbents.” Department of Energy (DOE) CAST program. Total budget- \$60,202. PI: D. Gang (100%)
- 2007-2008 “Ordered Mesoporous Carbons Sorbents Development for Space Missions and International Space Stations Water Recovery Systems (WRS)” National Aeronautics and Space Administration (NASA). Total budget- \$20,000. PI: D. Gang (100%) NNG05GH22H
- 2006-2009 “Removal of Selenium (Se) from Coal Mine Wastewater by GAC-Based Iron-Containing Adsorbents” (Department of Energy (DOE) CAST program. Total budget- \$202,290. PI: D. Gang (100%)
- 2006-2007 “Integrated Environmental Engineering, Chemical Engineering and Mercury Emissions Control Laboratory” (WVEPSCoR Instrumentation Grants Program, Total budget: \$15,000. PI: D. Gang (100%)
- 2007-2008 “Development of Biotechnology Laboratory Facilities to Support Teaching and Research” (PI: Jay M. Wiedemann, Funded by WV EPSCoR Instrumental Grants Program, Total budget: \$17,000. Co-PI: D. Gang (20%)
- 2005-2007 “Mercury Reduction from Coal Power Plant Emission Using Functionalized Ordered Mesoporous Carbons (FOMCs)” (Department of Energy (DOE) CAST program. Total budget- \$168,645. PI: D. Gang (100%)
- 2004-2005 “WVEPSCoR Proposal Preparation Mini-Grant” (Funded by West Virginia EPSCoR. Total budget: \$4,500. PI: D. Gang (100%)

- 2004-2007 “Recovery of Chromium and Arsenic from Toxic Waste Stream by Reactive Polymer-Coated Absorbents” (Funded by the Department of Energy (DOE) CAST program. Total budget- \$228,175. PI: D. Gang (100%)
- 2004-2008 “Semester/Summer Undergraduate Research Experience (SURE)” (Funded by West Virginia EPSCoR. Total budget: \$70,000. Co-PI: D. Gang (20%)
- 2003-2004 EPA Small Public Water Systems Technology Assistance Center (Funded by USEPA, Total budget- \$450,000. Co-PI: D. Gang (20%)
- 2002-2003 EPA Small Public Water Systems Technology Assistance Center (Funded by USEPA, Total budget- \$450,000. Co-PI: D. Gang (10%)
- 1995-1996 “WHE-1 flocculent preparation and application in treatment of electroplating wastewater.” Funded by Wuhan Fengfan Electroplating Co. Ltd. Total budget: RMB 80,000 (\$10,000). PI: D. Gang (100%)

US PATENTS

- 2025 Hydrogen Titanium oxide compositions and methods for making and using the same. [US Patent App. US 2025/0128958 A1](#). Role-- Lead inventor; patent holder, UL Lafayette
- 2025 Polyethyleneimine modified graphene oxides and methods for making and using the same. [US Patent App. 18/826,007, 2025](#). Role-- Lead inventor; patent holder, UL Lafayette
- 2024 Amorphous Cobalt-Inherent Silicon Oxide Catalyst. [US11884564B2](#). Role-- Lead inventor; patent holder, UL Lafayette
- 2023 Method of Manufacturing an Adsorbent and Resulting Composition of Matter. [US11554360B2](#). Role-- Lead Inventor; Patent Holder UL Lafayette
- 2023 Method for treating sludge using solar thermal concentrators. [US20230093562A1](#) Role: Co-Inventor; Patent Holder UL Lafayette.
- 2022 Integrated Biorefinery System and Method. [US17/846,505](#). Role- Co-Inventor; Patent Holder UL Lafayette
- 2021 Method for Preparation of Carbon Disulfide Modified Graphene Oxide for Pb (II) Adsorption. [US20210113988A1](#). Role-- Lead Inventor; Patent Holder UL Lafayette
- 2021 Biorefinery method and system for isolated environments. [US10947144B2](#). Co-Inventor; Patent Holder UL Lafayette
- 2019 Synthesis of a Novel Ordered Mesoporous Carbon Using COK-19 Template for Water and Wastewater Treatment. [US20190046953A1](#). Role-- Lead Inventor; Patent Holder UL Lafayette

- 2017 Multi-functional open graded friction course for in situ treatment of highway or roadway runoff. [US20170121226A1](#). Role-- Lead Inventor; Patent Holder UL Lafayette

PUBLICATIONS

Peer-reviewed Publications

(*) Indicates advisees (graduate students)

1. Anusha Imran, Xiaobo Lei, David J. Shoemaker, William E. Holmes, Hui Yan, Mark Zappi, **Daniel Gang (2025)**. "Adsorption of PFCAs using polyethyleneimine modified Biochar: Role of chain length and effects of water matrices." *Chemosphere*, 386, 144650. <https://doi.org/10.1016/j.chemosphere.2025.144650>. IF = 8.8
2. Chelsea Zeringue, William Chirdon, Wayne Sharp, **Daniel Gang**, Ahmed Khattab, Rafael Hernandez, W. Holmes, Mark Zappi (2025). "Production of green adhesives from sustainable proteins derived from municipal wastewater treatment plant sludges and potential enhancements from soy protein amending." *Journal of Environmental Management*, 391, 126497. <https://doi.org/10.1016/j.jenvman.2025.126497> IF = 8.4
3. Blake Foret, William Chirdon, Rafael Hernandez, Dhan Lord B Fortela, Emmanuel Revellame, Daniel Gang, Jalel Ben Hmida, William E Holmes, Mark E Zappi (2025). "A Techno-Economic Analysis of Integrating an Urban Biorefinery Process Within a Wastewater Treatment Plant to Produce Sustainable Wood Adhesives." *Sustainability*, 17 (15), 6679 <https://doi.org/10.3390/su17156679> IF = 3.3
4. Qiling Zhu, Shiwei Jin, **Daniel Gang**, Fangxing Yang (2025). "A review in analytical progress for house dust mite allergens." *Reviews on Environmental Health*, 40074681 <https://doi.org/10.1515/reveh-2024-0177> IF = 3.0
5. Chelsea Trahan Zeringue, William M. Chirdon, Wayne Sharp, **Daniel Gang**, Ahmed Khattab, Rafael Hernandez, William Holmes, and Mark E. Zappi (2024). "Physical and Chemical Characterization of Sustainable Green Adhesives Derived from Municipal Treatment Plant Sludges." *Sustainability*, 16 (21), 1-19 <https://doi.org/10.3390/su16219346> IF = 3.3
6. Gerson Martinez-Zuniga, Samuel Antwi, Percival Soni-Castro, Olatunji Olayiwola, Maksym Chuprin, William E Holmes, Prashanth Buchireddy, **Daniel Gang**, Emmanuel Revellame, Mark E Zappi, Rafael Hernandez (2024) "Methyl Mercaptan Removal from Methane Using Metal-Oxides and Aluminosilicate Materials." *Catalysts* 2024, 14(12), 907; <https://doi.org/10.3390/catal14120907> IF = 3.8
7. Bimi Shrestha*, B. Foret, W. Sharp, **Daniel Gang**, R. Hernandez, E. Revellame, D.Fortela, W. Holmes, M. Zappi (2024). "An Overview of the Potential for Municipal Wastewater Treatment Plants to Be Integrated into Urban Biorefineries for the Production of Sustainable Bio-Based Fuels and Other Chemicals." *Current Pollution Reports*, 10 (3) 548-564, <https://doi.org/10.1007/s40726-024-00318-6> IF = 8.20

8. Ashley Mikolajczyk*, Dhan Lord Fortela, Calvin Berry, William Chirdon, Rafael Hernandez, **Daniel Gang**, Mark E. Zappi (2024) "Evaluating the Suitability of Linear and Nonlinear Regression Approaches for the Langmuir Adsorption Model as Applied toward Biomass-Based Adsorbents: Testing Residuals and Assessing Model Validity." *Langmuir (ACS)*, <https://doi.org/10.1021/acs.langmuir.4c01786> IF = 3.70
9. Cameron Romero*, Z. Liu, K. Gordon, X. Lei, K. Joseph, E. Broussard, **Daniel Gang**, Z. Wei, Ling Fei (2024) "FeS₂ deposited on 3D-printed carbon microlattices as free-standing electrodes for lithium-ion batteries." *Chemical Communications* (Royal Society of Chemistry). <https://doi.org/10.1039/D4CC01202J> IF = 6.22
10. Ali Ettehadi, Maksym Chuprin, Mehdi Mokhtari, **Daniel Gang**, Philip Wortman, Ezat Heydari (2024) "Geological Insights into Exploration and Extraction of Lithium from Oilfield Produced-Water in the USA: A Review." *Energy & Fuels*, 38, 12, 10517–10541 <https://doi.org/10.1021/acs.energyfuels.4c00732> IF = 5.30
11. Devin Peck*, Naresh Deoli, William Holmes, **Daniel Gang**, Mark Zappi, Rafael Hernandez, Prashanth Buchireddy (2024) "Evaluation of a novel nickel ceramic filter prepared by urea precipitation method for removal of tars from biomass syngas using naphthalene as tar model compound." *Journal of the Energy Institute* 114 101563 <https://doi.org/10.1016/j.joei.2024.101563> IF = 5.70
12. Emmanuel Revellame, Remil Aguda*, Kristel Gatdula, W. Holmes, Dhan Fortela, Wayne Sharp, **Daniel Gang**, A. Chistoserdov, Rafael Hernandez, Mark E. Zappi (2024) "Microalgae in bioregenerative life support systems for space applications." *Algal Research*. 77, 103332 <https://doi.org/10.1016/j.algal.2023.103332> IF = 5.1
13. Dhan Lord B. Fortela, Ashley P. Mikolajczyk, Rafael Hernandez, Emmanuel Revellame, Wayne Sharp, William Holmes, **Daniel Gang**, and Mark E. Zappi (2024) "Dynamic Time Warping as Elementary Effects Metric for Morris-Based Global Sensitivity Analysis of High-Dimension Dynamical Models" *Math. Comput. Appl.* 2024, 29, 111 <https://doi.org/10.3390/mca29060111> IF = 1.9
14. Pubali Sarker*, Xiaobo Lei*, Kyle Taylor*, William Holmes, Hui Yan, Dongmei Cao, Mark E. Zappi, **Daniel D. Gang** (2023) "Evaluation of the adsorption of sulfamethoxazole (SMX) within aqueous influents onto customized ordered mesoporous carbon (OMC) adsorbents: Performance and elucidation of key adsorption mechanisms". *Chemical Engineering Journal*, 454, 140082 <https://doi.org/10.1016/j.cej.2022.140082> IF = 16.74
15. Xiaobo Lei*, Q. Lian*, Xu Zhang*, T. Karsili, W. Holmes, Y. Chen, Mark Zappi, **Daniel Gang** (2023) "A review of PFAS adsorption from aqueous solutions: Current approaches, engineering applications, challenges, and opportunities." *Environmental Pollution*. 321, 121138 <https://doi.org/10.1016/j.envpol.2023.121138> IF = 9.99
16. Devin Peck*, William Holmes, Mark Zappi, Rafael Hernandez, **Daniel Gang**, Prashanth Buchireddy (2023) "Novel nickel ceramic filter for hot gas cleanup of tars from syngas." *Fuel Processing Technology* 244, 107708

<https://doi.org/10.1016/j.fuproc.2023.107708> IF = 8.13

17. Percival Soni Castro, Gerson Martinez Zuniga, William Holmes, Prashanth R. Buchireddy, **Daniel D. Gang**, Emmanuel Revellame, Mark Zappi, Rafael Hernandez (2023) “Review of the adsorbents/catalysts for the removal of sulfur compounds from natural gas.” *Gas Science and Engineering*, 115, 205004. <https://doi.org/10.1016/j.jgsce.2023.205004> IF = 5.29
18. Chelsea Zeringue*, William, Chirdon; Wayne Sharp; **Daniel Gang**; Ahmed Khattab; Rafael Hernandez; Emmanuel Revellame; William Holmes; Mark Zappi (2023). “Production of Sustainable Green Adhesives from Proteinaceous Biomass with an Emphasis on Waste-Derived Protein Residuals: A Review” *Ind. Eng. Chem. Res.* 62, 33, 12716–12731. <https://pubs.acs.org/doi/10.1021/acs.iecr.3c00963> IF = 4.20
7. Devin Peck*, M. Zappi, **Daniel Gang**, J. Guillory, R. Hernandez, and P. Buchireddy (2023) “Review of Porous Ceramics for Hot Gas Cleanup of Biomass Syngas Using Catalytic Ceramic Filters to Produce Green Hydrogen/Fuels/Chemicals.” *Energies* 16(5), 2334, <https://doi.org/10.3390/en16052334> IF = 3.33
20. Bimi Shrestha*, Rafael Hernandez, Dhan Fortela, Wayne Sharp, Andrei Chistoserdov, **Daniel Gang**, E. Revellame, William Holmes, and Mark Zappi (2023) “Formulation of a Simulated Wastewater Influent Composition for Use in the Research of Technologies for Managing Wastewaters Generated during Manned Long-Term Space Exploration and Other Similar Situations—Literature-Based Composition Development.” *BioTech*, 12 (1), 8 <https://www.mdpi.com/2673-6284/12/1/8>
21. Qiyu Lian*, Lingling Hu, D. Ma, Yimu Jiao, Dehua Xia, Yajing Huang, Zhuoyun Tang, Wei Qu, Huinan Zhao, Chun He, **Daniel D. Gang** (2022) “Interstitial Atomic Bi Charge-Alternating Processor Boosts Twofold Molecular Oxygen Activation Enabling Rapid Catalytic Oxidation Reactions at Room Temperature”, *Advanced Functional Materials*, 2205054 <https://doi.org/10.1002/adfm.202205054> IF = 19.92
22. Xiaobo Lei*, Lunguang Yao, Qiyu Lian*, Xu Zhang*, Tiejun Wang*, William Holmes, Guoyu Ding, **Daniel Gang**, Mark E. Zappi (2022) “Enhanced adsorption of perfluorooctanoate (PFOA) onto low oxygen content ordered mesoporous carbon (OMC): adsorption behaviors and mechanisms”, *Journal of Hazardous Materials*. 421, 126810 <https://doi.org/10.1016/j.jhazmat.2021.126810> IF = 14.22
23. Xu Zhang*, **Daniel Gang**, J. Zhang, Xiaobo Lei*, Q. Lian*, W. Holmes, Mark Zappi, and Hong Yao (2022) “Insight into the activation mechanisms of biochar by boric acid and its application for the removal of sulfamethoxazole”. *Journal of Hazardous Materials*. 424, 127333 <https://doi.org/10.1016/j.jhazmat.2021.127333> IF = 14.22
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Thesis and Dissertation Publications

197. Gang, Dianchen 2001. “Modeling of THM and HAA formation in Missouri waters upon chlorination.” Ph.D. Dissertation, Department of Civil & Environmental Engineering, University of Missouri-Columbia, Columbia, Missouri. 388 pp.
198. Gang, Dianchen 1999. “Chromium(VI) removal by modified PVP coated silica gel.” M.S. Thesis, Department of Civil & Environmental Engineering, University of Missouri-Columbia, Columbia, Missouri. 107 pp.
199. Anusha Imran. “Adsorption of Perfluorocarboxylic Acids Using Polyethyleneimine-Modified Biochar: Role of Chain Length and Effects of Water Matrices.” M.S., University of Louisiana at Lafayette, Spring 2025. 124 pages. **ProQuest 32038174**
200. Xiaobo Lei. “Perfluorooctanoic acid (PFOA) adsorption by ordered mesoporous carbon (OMC) and polyethyleneimine modified graphene oxide (GO-PEI): Effects of water matrices and understanding mechanisms,” Ph.D., University of Louisiana at Lafayette, Spring 2023. 141 pages. **ProQuest 30575642**
201. Pubali Sarker. “Evaluation of the Adsorption of Sulfamethoxazole (SMX) within Aqueous Influent onto Customized Ordered Mesoporous Carbon (OMC) Adsorbents: Performance and Elucidation of Key Adsorption Mechanisms,” M.S., University of Louisiana at Lafayette, Fall 2022. 118 pages. **ProQuest 30241122**
202. Qiyu Lian. “Synthesis and Characterization of Carbon Disulfide Functionalized Graphene Oxide (GOCS) for Pb(II) Adsorption and Amorphous Cobalt-Inherent

- Silicon Oxide (Co-SiO_x) for 2,4-Dichlorophenols Oxidation” Ph.D dissertation, University of Louisiana at Lafayette, Spring 2021. 155 pages. **ProQuest 28496894**
203. Fahrin Islam. “Synthesis and Characterization of Phosphate Functionalized Graphene Oxide for Improved Resorcinol Adsorption from Aqueous Solution: Investigation of the Adsorption Mechanism” M.S. Thesis, University of Louisiana at Lafayette, Fall 2019. 94 pages.
204. Zaki Uddin Ahmad. “Synthesis and Characterization of Novel Functionalized Ordered Mesoporous Carbon (OMC) for Resorcinol and Sunset Yellow Removal,” Ph.D dissertation, University of Louisiana at Lafayette, Spring 2019. 147 pages. **ProQuest 13863458**
205. Qiyu Lian. “Adsorption of Lead(II) onto Phosphate Modified Ordered Mesoporous Carbon: Kinetics, Equilibrium and Thermodynamic Study” M.S. Thesis, University of Louisiana at Lafayette, Spring 2018. **ProQuest 10814555**
206. Aditya Rajeev Kaveeshwar. “Removal of Barium (II), Iron (II), and Strontium (II) from Fracking Wastewater using Pecan Shell-Based Activated Carbon: Modelling of Adsorption Kinetics, Isotherms, and Thermodynamic Analysis” M.S. Thesis, University of Louisiana at Lafayette, Spring 2018. 95 pages. **ProQuest 10808217**
207. Salman Sakib. “Design Optimization and Field Performance Evaluation of the Wave Suppression and Sediment Collection (WSSC) System: Computational Fluid Dynamics (CFD) Modeling, Surface Elevation Table (SET) and Marker Clay Approaches” M.S. Thesis, University of Louisiana at Lafayette, Summer 2017. 82 pages. **ProQuest 10618338**
208. Mas Iwan Konggidinata. “Adsorption Mechanism Assessments, Modifications on Pore Size and Surface Chemistry of Ordered Mesoporous Carbons for BTEX Removal: Batch Adsorption Studies.” M.S. Thesis, University of Louisiana at Lafayette, Spring 2017. 120 pages. **ProQuest 10266612**
209. Grant Besse. “Analysis and Optimization of the Wave Suppression and Sediment Collection System: Performance Characterization, Sand Collection, Mathematical Modeling and Computational Fluid Dynamic Modeling.” M.S. Thesis, University of Louisiana at Lafayette, Spring 2016. **ProQuest 10163277**
210. Bing Chao. “The Effects of Ordered Mesoporous Carbon (OMC) Structure on the Adsorption Capacity for Resorcinol Removal: Laboratory and Simulation Approaches.” M.S. Thesis, University of Louisiana at Lafayette, Spring 2016. 92 pages. **ProQuest 10163281**
211. Nicholas McCoy. “Functionality Evaluation of the Wave Suppressor and Sediment Collection (WSSC) System: Wave Reduction, Sediment Collection, Mathematical Model, and Preliminary Field Evaluation.” M.S. Thesis, University of Louisiana at Lafayette, Spring 2015. 140 pages. **UMI 1593246**

212. Imtiaz Uddin Ahmed. "Highway Runoff in Situ Treatment: Development and Evaluation of Multi-Functional Open Graded Friction Course (MOGFC) for Copper and Zine Removal." M.S. Thesis, University of Louisiana at Lafayette, Spring 2015, 86 pages. **UMI 1592787**
213. Hanlong Ren. "Modification and Characterization of Ordered Mesoporous Carbons for Resorcinol Removal." M.S. Thesis, University of Louisiana at Lafayette, Fall 2014, 71 pages. **UMI 1585869**
214. Rifat Quamrul Alam, "Development and Enhancement of a Mechanistic Model in Little Vermillion Bay: Incorporation of Stochastic Cloud Cover and Nutrient Flux as They Affect Light Dynamica and Phtoplankton Growth" M.S. Thesis, University of Louisiana at Lafayette, Summer 2014
215. Shokoofeh Golkhari Bagheini, "Basic Principles of Oil-Water Separation by Hydrocyclone" M.S. Thesis, University of Louisiana at Lafayette, Spring 2014, 93 pages. **UMI 1557551**
216. Jing Nie, "Landfill Leachate Treatment by Fenton's oxidation" M.S. Thesis, University of Louisiana at Lafayette, Fall 2013, 88 pages. **UMI 1585908**
217. Qilin Bao, "Microalgae Growth and Lipid Productivity in a Vertical Flat-Plate Photobioreactor: A Mechanistic Model Development" M.S. Thesis, University of Louisiana at Lafayette, Fall 2013, 131 pages. **UMI 1553873**
218. Ruwaida Bari. "Analysis of Water Parameters, Light Dynamics and Phytoplankton Growth Kinetics in Little Vermilion Bay: Implications for Mechanistic Model Development" M.S. Thesis, University of Louisiana at Lafayette, Spring 2013
219. Ruixuan Guo. "Synthesis and Surface Modification of Ordered Mesoporous Carbons for Resorcinol Removal." M.S. Thesis, University of Louisiana at Lafayette, Summer 2012
220. Prabhat Kiran Tiwari. "Quantification of Bucket Sediment Residuals." M.S. Thesis, University of Louisiana at Lafayette, Summer 2012
221. Ning Zhang. "Study of Chemical States, Composition and Adsorption Behavior for Iron Coated Granular Activated Carbon (Fe-GAC) in Terms of Selenate Removal and Feasible Adsorbent Modifications." Ph.D. Dissertation, West Virginia University, Spring 2011, Co-Chair
222. Lu Lin. "Development and Evaluation of Ordered Mesoporous Carbon for TOC Removal." M.S. Thesis, University of Louisiana at Lafayette, Spring 2011, Chair
223. Dong Yan. "Selenite Removal by Adsorption Using Iron-Coated Granular Activated Carbon and Column Study." M.S. Thesis, University of Louisiana at Lafayette, Spring 2010, Chair
224. Ning Zhang. "Selenite Removal Using GAC based Iron-Coated Adsorbents." M.S. Thesis, West Virginia University, Fall 2007 Co-Chair

225. Ravi Kumar Kadari. "Removal of Hexavalent Chromium and Trivalent Arsenic from Aqueous Solutions." M.S. Thesis, West Virginia University Institute of Technology, Spring 2006, Chair

Technical Reports

226. Gang, D. (2021). "GAMC Novel Adsorbent Development for BTEX Removal from Hydraulic Fracturing Flowback Water." A Final Technical Report submitted to Louisiana Board of Regents (LEQSF(2018-19)-RD-D-06). Baton Rouge, LA 70821. 33 pp
227. Gang, D. (2018). "Functionalized Mesoporous Sorbents Development for Hydraulic Fracturing Flowback Water Treatment." A Final Technical Report submitted to Louisiana Board of Regents (LEQSF(2016-17)-RD-C-15). Baton Rouge, LA 70821. 43 pp
228. Gang, D. (2017). "Field Investigation of the Wave Suppressor Sediment Collection (WSSC) System, a Highly Effective System for Shoreline Protection and Sediment Retention." A Final Technical Report submitted to Louisiana Board of Regents (LEQSF(2013-16)-RD-B-04). Baton Rouge, LA 70821. 97 pp
229. Gang, D. (2016). "Acquisition of Adsorption Analyzer for Hydraulic Fracturing Flowback Water Treatment Education and Research." A Final Technical Report submitted to Louisiana Board of Regents (LEQSF(2015-16)-ENH-TR-32). Baton Rouge, LA 70821. 35 pp
230. Gang, D. (2015). "Coastal Protection and Restoration Field Study Using Wave Suppressor Sediment Collection (WSSC) System." A Final Technical Report submitted to Louisiana Board of Regents (LOUISIANA EPSCoR (2013-14)-OPT-IN). Baton Rouge, LA 70821. 37 pp
231. Gang, D. (2015). "Development and Evaluation of Nano-Scaled Mesoporous Sorbents for Space Environmental Control and Life Support System (ECLSS)". A Final Technical Report submitted to LaSPACE, Louisiana State University. Baton Rouge, LA 70803. 43 pp
232. Gang, D. (2014). "Modular Sediment Retention and Shoreline Protection Structures." A Final Technical Report submitted to Louisiana Board of Regents. Baton Rouge, LA 70821. 68 pp
233. Gang, D. (2014). "Coastal Protection and Restoration Field Study Using Wave Suppressor Sediment Collection (WSSC) System." A Final Technical Report submitted to Louisiana Board of Regents. Baton Rouge, LA 70821. 31 pp
234. Gang, D. (2012). "Development of Novel Adsorbents for Space Lightweight Contingency Water Recovery Systems." A Final Technical Report submitted to Louisiana Board of Regents. Baton Rouge, LA 70821. 35 pp

235. Gang, D. (2011). "Development of Nano-Scale Mesoporous Sorbents for Space Water Recovery Systems (WRS)". A Final Technical Report submitted to LaSPACE, Louisiana State University. Baton Rouge, LA 70803. 30 pp
236. Gang, D. (2010). "Removal of Selenium (Se) from Coal Mine Wastewater by GAC-Based Iron-Containing Adsorbents". A Final Report submitted to the Center for Advanced Separation Technologies (CAST), Virginia Tech, Blacksburg. Virginia. 30 pp
237. Gang, D. (2009). "Mercury Reduction From Coal Power Plant Emission Using Functionalized Ordered Mesoporous Carbons (FOMCs)". A Final Report submitted to the Center for Advanced Separation Technologies (CAST), Virginia Tech, Blacksburg. Virginia. 23 pp.
238. Gang, D. (2007). "Recovery of Chromium and Arsenic from Toxic Waste Stream by Reactive Polymer-Coated Adsorbent". A Final Report submitted to the Center for Advanced Separation Technologies (CAST), Virginia Tech, Blacksburg. Virginia. 50 pp.
239. Gang, D. (2003). "N-Nitrosodimethylamine (NDMA) Occurrence in Missouri". A Final Report submitted to the EPA Technology Assistance Center, Columbia, Missouri. 11pp.
240. Gang, D. (2003). "Endocrine Disruptors (EDs) Occurrence and Impacts on Drinking Water Systems". A Final Report submitted to the EPA Technology Assistance Center, Columbia, Missouri. 16 pp.
241. Gang, D. (2003). "Field Prediction of TTHM and HAA5 Formation". A Final Report submitted to the EPA Technology Assistance Center, Columbia, Missouri. 11pp.
242. Tom. E. Clevenger and Gang, D. (2001). "Prediction of HAA & THM Speciation upon Chlorination". A Final Technical Report to US EPA Office of Ground Water and Drinking Water (OGDW). Missouri Technology Assistance Center for Small Public Drinking Water Systems, University of Missouri-Columbia, March 2001, 212 pages
243. Tom. E. Clevenger and Gang, D. (2001). "TTHM & HAA9 Formation in Ultrafiltration NOM Fraction Waters". A Final Technical Report to US EPA Office of Ground Water and Drinking Water (OGDW). Missouri Technology Assistance Center for Small Public Drinking Water Systems, University of Missouri-Columbia, March 2001, 25 pages

GRADUATE STUDENTS EDUCATION

- 2025 Anusha Imran. "Adsorption of Perfluorocarboxylic Acids Using Polyethyleneimine Modified Biochar: Role of Chain Length and Effects of Water Matrices." M.S., University of Louisiana at Lafayette, Spring 2025. Chair.

- 2025 David Shoemaker. “A Critical Review of Emerging Technologies for Direct Lithium Extraction from Brines: Current Industrial Practices, Challenges for Sustainable Process Integration, and a View of Current Commercialization Status.” M.S., University of Louisiana at Lafayette, Spring 2025. Co-Chair.
- 2025 Blake A Foret. “A Techno-Economic Analysis of Integrating an Urban Biorefinery Process in a Wastewater Treatment Plant to Produce Sustainable Wood Adhesives.” M.S., University of Louisiana at Lafayette, Spring 2025. Committee Member
- 2024 Ashley Picou Mikolajczyk. “Removal of 2,4-Dichlorophenol from Aqueous Solutions Using Biomass-Based Adsorbents: Isotherm Modeling, Performance Evaluations, and Application of Modified Cypress Sawdust.” Ph.D., University of Louisiana at Lafayette, Fall 2024, Committee Member
- 2023 Xiaobo Lei. “Perfluorooctanoic acid (PFOA) adsorption by ordered mesoporous carbon (OMC) and polyethyleneimine modified graphene oxide (GO-PEI): Effects of water matrices and understanding mechanisms,” Ph.D., University of Louisiana at Lafayette, summer 2023, Chair
- 2023 Chelsea Trahan Zeringue. “Production of Green Adhesives from Sustainable Proteins Derived from Urban-Based Sewage Sludges,” Ph.D., University of Louisiana at Lafayette, Fall 2023, Committee Member
- 2023 Remil Martinez Aguda. “Challenges and Potential Solutions to Microalgae Cultivation in a Space Station-based Biorefinery System” Ph.D., University of Louisiana at Lafayette, Spring 2023, Committee Member
- 2023 Bimi Shrestha. “Formulation of a Simulated Wastewater Influent Composition for Use in the Research of Technologies for Managing Wastewaters Generated during Manned Long-Term Space Exploration and Other Similar Situations—Literature-Based Composition Development” Ph.D., University of Louisiana at Lafayette, Spring 2023, Committee Member
- 2023 Stanley Okeke. “A Review of Lithium-Ion Sieves For Lithium Recovery From Aqueous Solutions: Preparation Performances & Challenges For Engineering Applications” M.S., University of Louisiana at Lafayette, Fall 2023. Chair.
- 2022 Pubali Sarker. “Evaluation of the Adsorption of Sulfamethoxazole (SMX) within Aqueous Influent onto Customized Ordered Mesoporous Carbon (OMC) Adsorbents: Performance and Elucidation of Key Adsorption Mechanisms” M.S., University of Louisiana at Lafayette, Fall 2022. Chair.
- 2022 Lingyiqian Luo. “Water-Gas Shift Reaction over Mesoporous CeO₂-Supported Pt Catalysts Using in Situ Spectroscopy” Ph.D., University of Louisiana at Lafayette, Fall 2022, Committee Member

- 2022 Devin Peck. “Development of a Novel Nickel-Ceramic Filter for Hot Gas Removal of Tars and Particulates from Biomass Syngas” Ph.D., University of Louisiana at Lafayette, Fall 2022, Committee Member
- 2022 Tyler Young. “Modeling the Effects of Climate Interaction on the Atchafalaya Basin Ecosystem Part 1: Hydrodynamic Model Setup and Verification” M.S., University of Louisiana at Lafayette, Fall 2022. Committee Member.
- 2021 Xiaobo Lei. “The morphological characterization of polyethyleneimine modified graphene oxide (GO-PEI) and its adsorption mechanisms for perfluorooctanoic acid (PFOA) removal” M.S., University of Louisiana at Lafayette, Fall 2021. Chair
- 2021 Qiyu Lian. “Synthesis and Characterization of Carbon Disulfide Functionalized Graphene Oxide (GOCS) for Pb(II) Adsorption and Amorphous Cobalt-Inherent Silicon Oxide (Co-SiO_x) for 2,4-Dichlorophenols Oxidation” Ph.D., University of Louisiana at Lafayette, Spring 2021. Chair
- 2021 Jonathan Trahan “Optimization of Methane Production During the Anaerobic Digestion of Cafeteria Food Waste.” M.S., University of Louisiana at Lafayette, Summer, 2021 Committee Member
- 2020 Erick Knezek. "The Application of the Six Sigma DMAIC Process Improvement Methods to Improve Emergency Responder Willingness to Respond to Disasters" PhD, University of Louisiana at Lafayette, Fall 2020, Co-Chair
- 2020 Ming Sun. “Developing Safety Performance Functions for Two-Way Stop-Controlled Intersections in Louisiana” Ph.D., University of Louisiana at Lafayette, Fall 2020, Committee Member
- 2020 Edward Scott LeBlanc. “Louisiana Rural Pedestrian Safety Review” M.S., University of Louisiana at Lafayette, Fall 2020 Committee Chair
- 2020 Ashley Picou Mikolajczyk. “An Evaluation of Lipid Capture Technologies for Lipid Production Processes from Oleaginous Micro-organisms” M.S., University of Louisiana at Lafayette, Fall 2020 Committee Member
- 2020 Sushmita Khanal. “Safety Effectiveness of Centerline Rumble Strips and Shoulder Rumble Strips on Louisiana Two-Lane Highways” M.S., University of Louisiana at Lafayette, Fall 2020 Committee Member
- 2019 Fahrin Islam. “Synthesis and Characterization of Phosphate Functionalized Graphene Oxide for Improved Resorcinol Adsorption from Aqueous Solution: Investigation of the Adsorption Mechanism” M.S, University of Louisiana at Lafayette, Fall 2019. Co-Chair
- 2019 Zaki Uddin Ahmad. “Synthesis and Characterization of Novel Functionalized Ordered Mesoporous Carbon (OMC) for Resorcinol and Sunset Yellow Removal” Ph.D, University of Louisiana at Lafayette, Spring 2019. Chair

- 2018 Qiyu Lian. “Adsorption of Lead(II) onto Phosphate Modified Ordered Mesoporous Carbon: Kinetics, Equilibrium, Thermodynamic and diffusion-controlled Study” M.S., University of Louisiana at Lafayette, Spring 2018. Chair
- 2018 Aditya Rajeev Kaveeshwar. “Removal of Ba (II), Fe (II), and Sr (II) from Fracking Wastewater using Pecan Shell based Activated Carbon: Modelling of Adsorption Kinetics, Isotherms, and Thermodynamic Analysis” M.S., University of Louisiana at Lafayette, Spring 2018. Co-Chair
- 2018 Jinze Song. "Special Problems and Solutions in Development of Shale Gas/Oil Reservoirs" PhD, University of Louisiana at Lafayette, Fall 2018, Committee Member
- 2017 Zaki Uddin Ahmad. “Synthesis and Characterization of a Novel Ordered Mesoporous Carbon Using COK-19 Template for Resorcinol Adsorption” M.S., University of Louisiana at Lafayette, Fall 2017. Chair
- 2017 Salman Sakib. “Design Optimization and Field Performance Evaluation of the Wave Suppression and Sediment Collection (WSSC) System: Computational Fluid Dynamics (CFD) Modeling, Surface Elevation Table (SET) and Marker Clay Approaches” M.S., University of Louisiana at Lafayette, Summer 2017. Chair
- 2017 Mas Iwan Konggidinata. “Application and Modifications of Ordered Mesoporous Carbon (OMC) for BTEX Removal: Characterization, Adsorption Mechanisms, and Kinetic Studies” M.S., University of Louisiana at Lafayette, Spring 2017. Co-Chair
- 2017 Yi Weng. "Spatial Division Multiplexed Transmission and Sensing in Few-Mode Fibers" PhD, University of Louisiana at Lafayette, Spring 2017, Committee Member
- 2017 Li, Hui “Effects of Water Content, Mineralogy and Anisotropy on the Mechanical Properties of Shale Gas Rocks,” Ph.D., University of Louisiana at Lafayette, Spring 2017, Committee Member
- 2017 Yi He. “Safety Effectiveness Analysis of Roundabouts in Louisiana” M.S., University of Louisiana at Lafayette, Fall 2017. Committee Member
- 2016 Grant Besse. “Analysis and Optimization of the Wave Suppression and Sediment Collection System: Performance Characterization, Sand Collection, Mathematical Modeling and Computational Fluid Dynamic Modeling.” M.S., University of Louisiana at Lafayette, Spring 2016, Chair
- 2016 Bing Chao. “The Effects of Ordered Mesoporous Carbon (OMC) Structure on the Adsorption Capacity for Resorcinol Removal: Laboratory and Simulation Approaches.” M.S., University of Louisiana at Lafayette, Spring 2016, Chair

- 2016 Dhan Lord Balais Fortela. “Enhancement of Microbial Oil and Biodiesel Production from Activated Sludge by Cultivation on Short Chain Fatty Acids” PhD, University of Louisiana at Lafayette, Summer 2016, Committee Member.
- 2016 Tang, Baobao. “Development of Mathematical and Computational Models to Design Selectively Reinforced Composite Materials.” M.S., University of Louisiana at Lafayette, Spring 2016, Committee Member
- 2015 Nicholas McCoy. “Functionality Evaluation of the Wave Suppressor and Sediment Collection (WSSC) System: Wave Reduction, Sediment Collection, Mathematical Model, and Preliminary Field Evaluation.” M.S., University of Louisiana at Lafayette, Spring 2015, Chair
- 2015 Imtiaz Uddin Ahmed. “Highway Runoff in Situ Treatment: Development and Evaluation of Multi-Functional Open Graded Friction Course (MOGFC) for Copper and Zinc Removal.” M.S., University of Louisiana at Lafayette, Spring 2015, Chair
- 2015 Li, Ben “Development of an Integrity Evaluation System for Well in Carbon Sequestration Fields.” Ph.D., University of Louisiana at Lafayette, Fall 2015, Committee Member
- 2015 Ren, Chong. “A Comparison of Mathematical Models for Axial Force Transfer in Tubulars in Horizontal Wells under Pre-buckling and Post-buckling Conditions.” M.S., University of Louisiana at Lafayette, Fall 2015, Committee Member
- 2014 Hanlong Ren. “Modification and Characterization of Ordered Mesoporous Carbons for Resorcinol Removal.” M.S., University of Louisiana at Lafayette, Fall 2014, Chair
- 2014 Rifat Quamrul Alam, “Development and Enhancement of a Mechanistic Model in Little Vermillion Bay: Incorporation of Stochastic Cloud Cover and Nutrient Flux as They Affect Light Dynamica and Phtoplankton Growth” M.S., University of Louisiana at Lafayette, Summer 2014, Co-Chair
- 2014 Shokoofeh Golkhari Bagheini, “Basic Principles of Oil-Water Separation by Hydrocyclone” M.S., University of Louisiana at Lafayette, Spring 2014, Co-Chair
- 2014 Wan Shou, “Development of an Automated Nanoparticles Spray System for Selectively Reinforcing Polymer Composites.” M.S., University of Louisiana at Lafayette, Spring 2014, Committee Member
- 2014 Hisham El-dardiry, “The use of Multi-Sensor Quantitative Precipitation Estimates for Deriving Extreme Precipitation Frequencies with Application in Louisiana.” M.S., University of Louisiana at Lafayette, Fall 2014, Committee Member
- 2013 Jing Nie, “Landfill Leachate Treatment by Fenton’s oxidation” M.S., University of Louisiana at Lafayette, Fall 2013, Co-Chair

- 2013 Qilin Bao, “Microalgae Growth and Lipid Productivity in a Vertical Flat-Plate Photobioreactor: A Mechanistic Model Development” M.S., University of Louisiana at Lafayette, Fall 2013, Co-Chair
- 2013 Ruwaida Bari. “Analysis of Water Parameters, Light Dynamics and Phytoplankton Growth Kinetics in Little Vermilion Bay: Implications for Mechanistic Model Development” M.S., University of Louisiana at Lafayette, Spring 2013, Co-Chair
- 2013 Md Abul Ehsan Bhuiyan. MS student, “Analysis of Sampling Uncertainties and Natural Variability of Rain Drop Size Distribution (DSD) and Integral Quantities Using a Cluster of Parsivel Disdrometers.” M.S., University of Louisiana at Lafayette, Spring 2013, Committee Member
- 2013 Mohamma Bhuyan, “Development of Treatment Performance Models for Flexible Pavements.” M.S., University of Louisiana at Lafayette, Fall 2013, Committee Member
- 2012 Ruixuan Guo. “Synthesis and Surface Modification of Ordered Mesoporous Carbons for Resorcinol Removal.” M.S., University of Louisiana at Lafayette, Summer 2012, Chair
- 2012 Prabhat Kiran Tiwari. “Quantification of Bucket Sediment Residuals.” M.S., University of Louisiana at Lafayette, Summer 2012, Co-Chair
- 2011 Ning Zhang. “Study of Chemical States, Composition and Adsorption Behavior for Iron Coated Granular Activated Carbon (Fe-GAC) in Terms of Selenate Removal and Feasible Adsorbent Modifications.” Ph.D, West Virginia University, Spring 2011, Co-Chair
- 2011 Lu Lin. “Development and Evaluation of Ordered Mesoporous Carbon for TOC Removal.” M.S. Thesis, University of Louisiana at Lafayette, Spring 2011, Chair
- 2011 Minghui Gang, “An Analytical Model for Temperature Included Stress in Well Drilling.” M.S., University of Louisiana at Lafayette, Spring 2011, Committee Member
- 2010 Dong Yan. “Selenite Removal by Adsorption Using Iron-Coated Granular Activated Carbon and Column Study.” M.S., University of Louisiana at Lafayette, Spring 2010, Chair
- 2007 Ning Zhang. “Selenite Removal Using GAC based Iron-Coated Adsorbents.” M.S., West Virginia University, Fall 2007 Co-Chair
- 2006 Ravi Kumar Kadari. “Removal of Hexavalent Chromium and Trivalent Arsenic from Aqueous Solutions.” M.S., West Virginia University Institute of Technology, Spring 2006, Chair

PROFESSIONAL REGISTRATION

- Registered Professional Engineer (Louisiana) NO: PE-0047017

- Registered Professional Engineer (West Virginia) NO: 16091
- Registered Professional Engineer (Missouri) NO: PE-2003001035

SELECTED PROFESSIONAL ACTIVITIES

2025-present	Member, Editorial Board, Environments. MDPI
2013-present	Member, Editorial Board, Journal of Wuhan Institute of Technology
2011-2023	Leader, Civil Engineering Graduate Program Accreditation, Southern Association of Colleges and Schools (SACS)
2004-2014	Member, Water Environment Federation (WEF), Literature Review Committee
2024	Panelist, National Science Foundation (NSF) Proposal Review Panel, Division of Chemical, Bioengineering, Environmental, and Transport Systems (CBET), Environmental Engineering. FY24 1440 UNSOL P1: Chemical Treatment Processes. P241294
2024	PhD Dissertation Board Foreign Examiner, “Adsorptive Potential of Surface Modified Agricultural Waste Biomass for the Removal of Anionic Dye from Water Environment: Economic and an Eco Friendly Approach.” Bharath Balji G, Anna University, Chennai 600 025. India, Summer 2024
2023	Oak Ridge Associated Universities (ORAU) Proposal Review, “Valorization of local kaolin as adsorbent and catalyst for water/wastewater treatment”. Nazarbayev University Research Review – Fall 2023
2023	Oak Ridge Associated Universities (ORAU) Proposal Review, “Understanding the impact of climate and anthropogenic water abstraction on water storage decline: A case study of endorheic lakes in Burabay National Nature Park”. Nazarbayev University Research Review – Fall 2023
2022	Panelist, National Science Foundation (NSF) Proposal Review Panel, Division of Chemical, Bioengineering, Environmental, and Transport Systems (CBET), Environmental Engineering. UNS FY22 1440 Panel#6
2022	PhD Dissertation Board Foreign Examiner, “Reclamation of Harmful Pollutants from Aqueous Solution Using Hybrid Magnetic Nano Composites.” JANET JOSHIBA G, Anna University, Chennai 600 025. India, Spring 2022
2022	PhD Dissertation Board Foreign Examiner, “Eradication of Pharmaceutical Contaminant from Water Using Carbon Based Magnetic Spheres- A Sustainable Approach.” PRASANNAMEDEHA G, Anna University, Chennai 600 025. India, Fall 2022

- 2022 Book Reviewer, “Advanced Transport Biofuels: Production, Economics and Sustainability”, by Cheng Tung Chong and Jo-Han Ng. ELSEVIER Publishing.
- 2021 Panelist, National Science Foundation (NSF) Proposal Review Panel, NSF Experimental Program to Stimulate Competitive Research (EPSCoR). Research Infrastructure Improvement (RII) Track 4.
- 2021 PhD Dissertation Board Foreign Examiner, “Studies on Preparation and Characterization of Sludge Biomass Derived Activated Carbon, Hybrid Nanocomposite Materials for Adsorption and Photocatalytic Applications.” Ms. V. RAMYA, University of Madras, Chepauk, Chennai India, Fall 2021
- 2021 PhD Dissertation Board Foreign Examiner, “Removal of toxic arsenic from aqueous solution using electrodeionization technique.” SENTHIL RATHI B, Anna University, Chennai 600 025. India, Fall 2021
- 2020 The Army Research Office (ARO) proposal review. “Linking Adsorption Strength to Chemical Fate of Organic Pollutants in Aqueous Media”, Fall 2020
- 2020-2021 Guest Editor, Journal of Hazardous Materials.
- 2019 Proposal Review, “Experimental and modeling investigation of trivalent and hexavalent chromium in soils irrigated with wastewater”. Nazarbayev University Research Review – Fall 2019
- 2019 Book Reviewer, “Conventional and Sustainable Energy: Yesterday, Today and Tomorrow”, by J. Liu, and S. Bashir. ACS books, 1st ed.
- 2019 Reviewer for AccessEngineering, McGraw-Hill, Membrane BioReactors (MBR) Wastewater Treatment Process Design Calculations Spreadsheet.
- 2019 Session Chair. 2019 5th International Conference on Environmental and Bio-Engineering. Singapore, January 7-9, 2019
- 2018 Panelist, National Science Foundation (NSF) Proposal Review Panel, Division of Chemical, Bioengineering, Environmental, and Transport Systems (CBET), Engineering. MRI P#2
- 2018 Panelist, National Science Foundation (NSF) Proposal Review Panel, Division of Chemical, Bioengineering, Environmental, and Transport Systems (CBET), Environmental Engineering. NSF 1440 Panel #6
- 2018 Reviewer for AccessEngineering, McGraw-Hill, Dissolved Air Flotation (DAF) Design Calculations Spreadsheet
- 2018 Reviewer for AccessEngineering, McGraw-Hill, Update MBBR Process Design Workbooks

- 2018 Reviewer for AccessEngineering, McGraw-Hill, UASB WW Treatment Design Calculations
- 2016 Panelist, National Science Foundation (NSF) Proposal Review Panel, Division of Chemical, Bioengineering, Environmental, and Transport Systems (CBET), Environmental Engineering. NSF 1440 Panel #2
- 2016 Reviewer for AccessEngineering, McGraw-Hill, Sequencing Batch Reactor (SBR) Wastewater Treatment Spreadsheet
- 2016 Technical Working Group Expert (Geotechnical engineering, engineering structures). Restore Act Center of Excellence for Louisiana
- 2013 Book Reviewer, “Nanomaterials for Energy”, by J. Liu, S. Bashir, and L. D. Chen. ACS books, 1st ed.
- 2013 Book Reviewer, “Engineering Skills for Career Success”, by C. Alexander and J. Watson. McGraw-Hill Science/Engineering/Math, 1st ed.
- 2010 Lead in establishing “Agreement of Coordinated Undergraduate Degree Program (CUDP) between the University of Louisiana at Lafayette, USA and Wuhan Institute of Technology, People’s Republic of China” (Signed April 26, 2012)
- 2007 Chair Local Arrangement, American Society of Engineering Education (ASEE) North Central Section 2007 Conference
- 2004 Book Reviewer, “Fluid Mechanics: Fundamentals and Applications”, by Yunus A. Cengel and John M. Cimbala, 1st ed.
- 2002- 2006 Member, American Water Works Association, Organic Contaminants Control Committee

PROFESSIONAL MEMBERSHIPS

- 2015- present Chi Epsilon Honor Society for Engineers
- 2013- present Coastal, Oceans, Ports, and Rivers Institute (COPRI)
- 2010- present Water Environment Federation (WEF)
- 2005- present Association of Environmental Engineering and Science Professors (AEESP)
- 2003- present American Chemical Society (ACS)
- 2001- present American Society of Civil Engineers (ASCE)
- 2001- present Environmental and Water Resources Institute (EWRI)
- 2000- present American Water Works Association (AWWA)
- 2003- 2007 American Society for Engineering Education (ASEE)

1990- 1997 Chinese Chemical Society

SELECTED INVITED PRESENTATIONS (presenter underlined)

1. **Daniel Gang**, Xiaobo Lei, William Holmes, Mark E. Zappi (**2025**). “Removal of PFAS from Water by Adsorption: Recent Progress and Future Perspectives.” The 21st European Symposium on Fluorine Chemistry. August 3-9, Lisbon, Portugal.
2. David Shoemaker, Xiaobo Lei, William E. Holmes, Rafael A. Hernandez, Dhan Lord Fortela, Ashley Mikolajczyk, **Daniel Gang**, Mark E. Zappi (**2025**). “Advancing LNG Sustainability Through Lithium Recovery from Oilfield Brine.” Americas LNG Summit & Exhibition, Lake Charles, LA. USA October 19-21, 2025.
3. Samia Alam, David Shoemaker, Xiaobo Lei, William E. Holmes, Mehdi Mokhtari, Mark Zappi, **Dianchen Gang** (**2025**). “Direct Lithium Extraction from Natural Gas Produced Water Using Granular PVDF–Lithium Ion-Sieve: Performance and Application Potential.” Americas LNG Summit & Exhibition, Lake Charles, LA. USA October 19-21, 2025.
4. Umama Rashid Lamiya, David J. Shoemaker, Xiaobo Lei, William E. Holmes, Jonathan Raush, Mark E. Zappi, **Daniel Gang** (**2025**); “Adsorption and Recovery of Tellurium from Aqueous Solutions Using Calcined Mg-Al Layered Double Hydroxides.” Louisiana Energy Research Symposium (LERS). Baton Rouge, LA. USA. October 3rd, 2025
5. David Shoemaker, Xiaobo Lei, William E. Holmes, Rafael A. Hernandez, Dhan Lord B. Fortela, Ashley P. Mikolajczyk, Mark E. Zappi, **Daniel Gang** (**2025**); “Peroxide-Enhanced Hydrogen Titanate Ion Sieves for Efficient Lithium Extraction from U.S. Brines Using a Novel Hydrogen Titanate Metal Oxide Framework.” Louisiana Energy Research Symposium (LERS). Baton Rouge, LA. USA. October 3rd, 2025
6. Anusha Imran; William E. Holmes; Xiaobo Lei, Hui Yan, David Shoemaker, Mark Zappi; **Daniel Gang** (**2025**); “Adsorption of Short- to Long-chain PFCAs Using Polyethyleneimine Modified Mesoporous Biochar: Effects of Water Matrices and Understanding Mechanisms.” RemTech Europe 2025, Ferrara, Italy. Sep 17-19, 2025
7. David Shoemaker; William E. Holmes; Mark E. Zappi; **Daniel Gang** (**2025**); “Innovative Strategies and Current Practices for Meeting Lithium Demand via Direct Lithium Extraction with an Emphasis on Brines from the Gulf of American Region.” Engineering and Technology Week 2025 Graduate Presentation Competition. University of Louisiana at Lafayette, Lafayette, Louisiana, USA. March 24-28, 2025.
8. Anusha Imran; Aubrey Tuten; William E. Holmes; Mark E. Zappi; **Daniel Gang** (**2025**); “Adsorption of Short- to Long-chain PFCAs Using Polyethyleneimine Modified Mesoporous Biochar: Effects of Water Matrices and Understanding Mechanisms.” Engineering and Technology Week 2025 Graduate Presentation Competition. University of Louisiana at Lafayette, Lafayette, Louisiana, USA. March 24-28, 2025.
9. Kory Trosclair; David Shoemaker; Xiaobo Lei; Anusha Imran; Jonathan Raush; Mark E. Zappi; **Daniel Gang** (**2025**); “Tellurium Recovery Using Advanced

- Oxidative Processes.” Engineering and Technology Week 2024 Undergraduate Presentation Competition. University of Louisiana at Lafayette, Lafayette, Louisiana, USA. March 24-28, 2025.
10. David Shoemaker; William E. Holmes; Mark E. Zappi; **Daniel Gang (2025)**; “Innovative Strategies and Current Practices for Meeting Lithium Demand via Direct Lithium Extraction with an Emphasis on Brines from the Gulf of American Region.” Engineering and Technology Week 2025 Graduate Poster Competition. University of Louisiana at Lafayette, Lafayette, Louisiana, USA. March 24-28, 2025.
 11. Anusha Imran; Aubrey Tuten; William E. Holmes; Mark E. Zappi; **Daniel Gang (2025)**; “Adsorption of Short- to Long-chain PFCAs Using Polyethyleneimine Modified Mesoporous Biochar: Effects of Water Matrices and Understanding Mechanisms.” Engineering and Technology Week 2025 Graduate Post Competition. University of Louisiana at Lafayette, Lafayette, Louisiana, USA. March 24-28, 2025.
 12. Umama Lamiya; David Shoemaker; Xiaobo Lei; Samia Alam; Anusha Imran; William Holmes; Mark Zappi; **Daniel Gang (2025)**; “Adsorption and Recovery of Tellurium from Aqueous Solution Using Mg-Al Layered Double Hydroxide.” Engineering and Technology Week 2025 Graduate Post Competition. University of Louisiana at Lafayette, Lafayette, Louisiana, USA. March 24-28, 2025.
 13. Samia Alam; David Shoemaker; Xiaobo Lei; Umama Lamiya; Anusha Imran; William Holmes; Mark Zappi; **Daniel Gang (2025)**; “Synthesis and Performance Evaluation of Granulated PVDF-Lithium Ion-Sieve: An Efficient Lithium Recovery Method for Industrial Applications.” Engineering and Technology Week 2025 Graduate Post Competition. University of Louisiana at Lafayette, Lafayette, Louisiana, USA. March 24-28, 2025.
 14. Kory Trosclair; David Shoemaker; Xiaobo Lei; Anusha Imran; Jonathan Raush; Mark E. Zappi; **Daniel Gang (2025)**; “Tellurium Recovery Using Advanced Oxidative Processes.” Engineering and Technology Week 2024 Undergraduate Post Competition. University of Louisiana at Lafayette, Lafayette, Louisiana, USA. March 24-28, 2025.
 15. **Daniel Gang**, David Shoemaker, William Holmes, Mark Zappi (2024). “Lithium Recovery From Oil Gas Production Water: Current approaches, challenges and opportunities.” *The IWA 17th Small Water and Wastewater Systems and 9th Resource Oriented Sanitation Conferences*. November 10-14, Curitiba, Paraná State, Brazil.
 16. **Daniel Gang**, Xiaobo Lei, William Holmes, Mark Zappi (2024). “Evaluation of the adsorption of perfluorooctanoate (PFOA) onto customized ordered mesoporous carbon (OMC): adsorption behaviors and mechanisms.” *The IWA 17th Small Water and Wastewater Systems and 9th Resource Oriented Sanitation Conferences*. November 10-14, Curitiba, Paraná State, Brazil.
 17. **Daniel Gang**; David J. Shoemaker; Xiaobo Lei; William E. Holmes; Mark E. Zappi (2024). “Nano-scale mesoporous Lithium Ion-Sieves (NSMLIS) for Lithium Recovery from Brine Solution.” *15th International Conference of Surfaces, Coatings and Nanostructured Materials*. Barcelona, Spain. July 7-11, 2024.

18. **Daniel Gang (2024)**. “PFAS adsorption from aqueous solutions: Current approaches, engineering applications, challenges, and opportunities.” South-Central University for Nationalities, Wuhan, P. R. China. May 29, 2024.
19. **Daniel Gang (2024)**. “Emerging Technologies for Direct Lithium Extraction from Brines: Current Industrial Practices and Challenges for Sustainable Process Integration.” South-Central University for Nationalities, Wuhan, P. R. China. May 30, 2024.
20. Kory Trosclair; David J. Shoemaker; Xiaobo Lei; Anusha Imran; Jonathan R. Raush; Mark E. Zappi; **Daniel Gang (2024)**; “Tellurium Recovery Using AOPs.” Undergraduate Research Conference. University of Louisiana at Lafayette, Lafayette Louisiana, USA. March November 15, 2024.
21. David Shoemaker; William E. Holmes; **Daniel Gang**, Mark E. Zappi (2024). “Innovative Strategies and current Practices for Meeting Lithium Demand via Direct Lithium Extraction With an Emphasis on Brines from the Gulf of Mexico Region”. *41st United States Association for Energy Economics North American Conference*. Baton Rouge, LA, USA. November 3-6, 2024.
22. Elizabeth Boyd, William E Holmes, Rafael Hernandez, **Daniel Gang**, Mark E Zappi (2024). “Investigation of Advanced Oxidation Processes for Removal of Perfluorooctanoic Acid (PFOA) from Aqueous Matrices.” 2024 AIChE Annual Meeting. October 27-31, 2024, San Diego, CA, USA
23. David Shoemaker; Xiaobo Lei; William E. Holmes; Mark E. Zappi; **Daniel Gang (2024)**; “White Gold: The Hunt for a Sustainable Lithium Supply.” *Engineering and Technology Week 2024 Graduate Presentation Competition*. University of Louisiana at Lafayette, Lafayette Louisiana, USA. March 18-20, 2024.
24. Serenity Broussard; William E. Holmes; **Daneil Gang**; Rafael Hernandez; Mark E. Zappi (2024); “Decoding Degradation: Navigating the Optimal Ratio of Hydrogen Peroxide in Low-Pressure UV Photolysis for 1,4-Dioxane Degradation.” *Engineering and Technology Week 2024 Graduate Poster Competition*. University of Louisiana at Lafayette, Lafayette Louisiana, USA. March 18-20, 2024
25. Kory Trosclair; David J. Shoemaker; Xiaobo Lei; Anusha Imran; Jonathan R. Raush; Mark E. Zappi; **Daniel Gang (2024)**; “Tellurium Recovery from End-of-Life Solar Panels Using Advanced Oxidative Processes.” *Engineering and Technology Week 2024 Undergraduate Poster Competition*. University of Louisiana at Lafayette, Lafayette Louisiana, USA. March 18-20, 2024.
26. Aubrey Tuten; Anusha Imran; David J. Shoemaker; William E. Holmes; Mark E. Zappi; **Daniel Gang (2024)**; “Removal of GenX from Water through Adsorption.” *Engineering and Technology Week 2024 Undergraduate Poster Competition*. University of Louisiana at Lafayette, Lafayette Louisiana, USA. March 18-20, 2024.
27. Julia Werther; David J. Shoemaker; Xiaobo Lei; William E. Holmes; Mark E. Zappi; **Daniel Gang (2024)**; “Synthesis of Titanium-Based Lithium-Ion Sieves for the Selective Recovery of Lithium-ions from Brine.” *Engineering and Technology Week*

- 2024 Undergraduate Poster Competition. University of Louisiana at Lafayette, Lafayette Louisiana, USA. March 18-20, 2024.
28. Serenity Broussard, William E Holmes, Rafael Hernandez, **Daniel Gang**, Mark E Zappi (2023). "Optimization of Advanced Oxidation Processes for Removal of 1, 4-Dioxane from Water Influent." 2023 AIChE Annual Meeting. November 5-10, 2023, Orlando, FL, USA
 29. Xiaobo Lei; William Holmes; Mark Zappi; **Daniel Gang** (2023). "The role of amine and amide I functional groups in the adsorption of perfluorooctanoic acid (PFOA) onto polyethyleneimine modified graphene Oxide (GO-PEI)". 2023 American Water Works Association Southwest Section Annual Conference & Exposition. Lafayette, LA. October 15 – 17, 2023
 30. David Shoemaker; Xiaobo Lei; William Holmes; **Daniel Gang**; Mark Zappi (2023). "A Review of Current Adsorption Technology and Engineering Challenges for the Remediation of PFAS from Aqueous Solutions". 2023 American Water Works Association Southwest Section Annual Conference & Exposition. Lafayette, LA. October 15 – 17, 2023
 31. **Daniel Gang**, Xiaobo Lei, William Holmes, Mark Zappi, **Daniel Gang** (2023) "PFAS Adsorption From Aqueous Solutions: Current Approaches, Engineering Applications, Challenges, and Opportunities." PEOPLE 2023 – Collaborative Solutions to Environmental Problems under Climate Change, Montreal, Canada. August 7-11, 2023
 32. **Daniel Gang**, Xiaobo Lei (2023). "Synthesis of polyethyleneimine modified graphene oxide (GO PEI) and its performance in perfluorooctanoic acid (PFOA) adsorption." THERMEC'2023 International Conference on Processing & Manufacturing of Advanced Materials, Vienna, Austria. July 02- 07, 2023
 33. **Daniel Gang** (2023). "PFAS adsorption: Current approaches, engineering applications, challenges, and opportunities." ASCE 2023 ASCE LA Section Spring Conference, Lafayette, LA, USA. April 27 to 28, 2023
 34. Xiaobo Lei, William Holmes, Mark Zappi, **Daniel Gang** (2022) "Adsorption of perfluorooctanoic acid (PFOA) onto polyethyleneimine modified graphene oxide (GO-PEI)", Fall 2022 American Chemical Society (ACS) National Meeting, Chicago, IL. Aug 20 - 24, 2022
 35. Xiaobo Lei, Holmes WE, Zappi ME, **Daniel Gang** (2022). "The role of amine and amide I functional groups in the adsorption of perfluorooctanoic acid (PFOA) onto polyethyleneimine modified graphene oxide". AOAC Southern Section Annual Meeting. Hilton Garden Inn Hotel – Buckhead, Atlanta, Georgia, USA. April 19-20, 2022.
 36. Xiaobo Lei, Holmes WE, Zappi ME, **Daniel Gang** (2022). "Like a magnet - Adsorption of perfluorooctanoic acid (PFOA) onto polyethyleneimine modified graphene oxide (GO-PEI)". Engineering and Technology Week 2022 Graduate Poster Competition. University of Louisiana at Lafayette, Lafayette Louisiana, USA. April 4-8, 2022.

37. Xiaobo Lei, Holmes WE, Zappi ME, **Daniel Gang (2022)**. “Like a magnet - Adsorption of perfluorooctanoic acid (PFOA) onto polyethyleneimine modified graphene oxide (GO-PEI)”. *Graduate Appreciation Week 2022 Poster Competition*. University of Louisiana at Lafayette, Lafayette Louisiana, USA. March 30-31, 2022.
38. Xiaobo Lei, Holmes WE, Zappi ME, **Daniel Gang (2022)**. “The role of amine and amide I functional groups in the adsorption of perfluorooctanoic acid (PFOA) onto polyethyleneimine modified graphene oxide”. *7th Annual Regional Student Scholars Forum*. Louisiana State University Shreveport, Louisiana, USA. March 11, 2022.
39. Michael Gee, Xiaobo Lei, William Holmes, Pubali Sarker, Mark Zappi, and **Daniel Gang (2021)**. “Enhanced Adsorption of Perfluorooctanoic Acid (PFOA) from Aqueous Solution by Oak Sawdust Derived Activated Carbon”. *The Australasian Conference of Undergraduate Research*. Australian National University, September 15-17, 2021, Canberra, Australia.
40. Michael Gee, Xiaobo Lei, William Holmes, Pubali Sarker, Mark Zappi, and **Daniel Gang (2021)**. “Adsorption of Perfluorooctanoic Acid (PFOA) from Aqueous Solution by Oak Sawdust Derived Activated Carbon”. *Gulf Coast Undergraduate Research Symposium*, Rice University, October 17, 2021, Houston, TX, USA.
41. Nicholas Marcil, Mark Zappi, Dhan Lord Fortela, Emmanuel Revellame, **Daniel Gang**, Wayne Sharp, William Holmes, Rafael Hernandez **(2021)**. “How Low Can It Go? Survivability of Aerobic Activated Sludge Fed Dilute-Strength Wastes for Space Applications.” *2021 AIChE Annual Meeting*. November 7-11, 2021 Boston, MA
42. Percival Soni Castro, Rafael Hernandez, William Holmes, Mark Zappi, August Gallo, **Daniel Gang (2021)**. “Development of catalysts for removal of sulfur compounds from natural gas.” *2021 AIChE Annual Meeting*. November 7-11, 2021 Boston, MA
43. Xiaobo Lei, Qiyu Lian, William Holmes, **Daniel Gang**, Mark Zappi **(2021)**. “Enhanced adsorption of perfluorooctanoic acid (PFOA) onto low oxygen content ordered mesoporous carbon (OMC): Adsorption behaviors and mechanisms”. *2021 LaSPACE Council Meeting*. October 30, Baton Rouge, LA
44. **Gang, D. (2020)**. “Using Chlorine Demand to Predict Disinfection by-products (THM, HAA) Formation.” ASCE 2020 Louisiana Conference. September 17, 2020, Lafayette, LA, USA
45. Lian, Q. M. Zappi, **D. Gang, (2020)**. “Synthesis and characterization of carbon disulfide modified graphene oxide for Pb(II) removal from aqueous solution.” *2020 International Conference on Frontiers of Nanomaterials and Nanotechnology*. January 10-12, 2020, Athens, Greece
46. **Gang, D. (2020)**. “From Disinfection By-Products Control to Advanced Water Treatment Using Functional Adsorbents.” 2nd Workshop on Water, Energy, Environment, and Health Nexus. January 21-22, 2020, Lafayette, LA, USA
47. Zaki Uddin Ahmad, Mark Zappi, **Gang, D. (2019)**. “Synthesis and Characterization of Neodymium Doped Ordered Mesoporous Carbon (OMC) for Sunset Yellow

- Adsorption: Artificial Neural Network (ANN) Modeling”. *5th International Conference on Environment and Bio-Engineering*. January 7-9, 2019, Singapore.
48. Lian, Z. Ahmad I, M. Zappi, **D. Gang, (2019)**. “CS₂ Modified Graphene Oxide (GO-CS): Synthesis, Characterization, Pb(II) Adsorption, and Adsorption Mechanism.” *2019 International Union of Pure and Applied Chemistry (IUPAC)*. July 5-12, 2019, Paris, France
 49. Fahrin Islam, Zaki U. Ahmad, Q. Lian, X. Lei, M. E. Zappi, D. Depan and **Daniel D. Gang (2019)**. “Phosphate Functionalized Graphene Oxide as Adsorbent for the Removal of Pb(II) from Aqueous Solution.” *22nd International Conference on Composite Materials*, August 11-16, 2019, Melbourne, Australia
 50. **Gang, D. (2019)**. “Ordered Mesoporous Carbon: Fabrication, Modification, Characterization, and Application as Adsorbents for Water Pollutants Removal.” Tianjin University, Tianjin, P. R. China. May 28, 2019.
 51. **Gang, D. (2019)**. “From Disinfection by Products Control to Functional Material Development.” Beijing Jiaotong University Weihai, Weihai, P. R. China. May 29, 2019.
 52. **Gang, D. (2019)**. “Ordered Mesoporous Carbon for Water Pollutants Removal.” Beijing Jiaotong University Weihai, Weihai, P. R. China. May 29, 2019.
 53. **Gang, D. (2019)**. “Ordered Mesoporous Carbon: Fabrication, Modification, Characterization, and Application as Adsorbents for Water Pollutants Removal.” Henan University, Kaifeng, P. R. China. June 18, 2019.
 54. **Gang, D. (2019)**. “Ordered Mesoporous Carbon: Fabrication, Modification, Characterization, and Application as Adsorbents for Water Pollutants Removal.” Henan Normal University, Xinxiang, P. R. China. June 17, 2019.
 55. **Gang, D. (2019)**. “Ordered Mesoporous Carbon: Fabrication, Modification, Characterization, and Application as Adsorbents for Water Pollutants Removal.” South-Central University for Nationalities, Wuhan, P. R. China. June 14, 2019.
 56. **Daniel Gang, Zaki Uddin Ahmad, Mark E. Zappi (2018)**. “Neodymium Incorporated Ordered Mesoporous Carbon (OMC) for Enhanced Adsorption of Sunset Yellow (SY).” *World Congress on Chemistry*. November 15-17, 2018, Rome, Italy
 57. **Gang, D. (2018)**. “Ordered Mesoporous Carbon: Fabrication, Modification, Characterization, and Application as Adsorbents for Water Pollutants Removal.” Beijing Jiaotong University, Beijing, P. R. China. June 20, 2018.
 58. **Gang, D. (2018)**. “From Disinfection by Products Control to Functional Material Development and Sustainable Design.” Beijing Jiaotong University, Beijing, P. R. China. July 10, 2018.
 59. **Gang, D. (2018)**. “Ordered Mesoporous Carbon: Fabrication, Modification, Characterization, and Application as Adsorbents for Water Pollutants Removal.” Hebei University of Science and Technology, Shijiazhang, Hebei Province, P. R. China. June 27, 2018.

60. Qiyu Lian, Zaki Uddin Ahmad, Daniel Gang (2018). "Adsorption of Lead(II) onto Phosphate Modified Ordered Mesoporous Carbon: Kinetics, Equilibrium and Thermodynamic Study". *The Ninth International Conference on Environmental Science and Technology*. June 25 -28, Houston, TX
61. Zaki Uddin Ahmad, Qiyu Lian, Mark Zappi, Daniel Gang (2018). "Kinetics and Equilibrium Study of Resorcinol Adsorption onto Surface Modified Ordered Mesoporous Carbon". *The Ninth International Conference on Environmental Science and Technology*. June 25 -28, Houston, TX
62. Zaki Uddin Ahmad, Mark E. Zappi, and D. Gang (2018). "Adsorptive Removal of Sunset Yellow FCF Dye onto Neodymium Modified Ordered Mesoporous Carbon." *4th Global Nanotechnology Congress and Expo*. April 16-18, Dubai, UAE
63. Qiyu Lian, Zaki Uddin Ahmad, Mark E. Zappi, and D. Gang (2018). "Adsorption of Lead(II) onto Phosphate Modified Ordered Mesoporous Carbon: Kinetics, Equilibrium and Thermodynamic Study." *4th Global Nanotechnology Congress and Expo*. April 16-18, Dubai, UAE
64. Zaki Uddin Ahmad¹, Mark E. Zappi, and D. Gang (2017). "Synthesis and Characterization of a Novel Ordered Mesoporous Carbon Using COK-19 Template for Resorcinol Adsorption." *BIT's 7th Annual World Congress of Nano Science & Technology*. October 24-26, Fukuoka, Japan
65. Daniel Gang (2017). "From Disinfection by Products Control, Coastal Erosion Mitigation, to Functional Material Development and Sustainable Design." *2017 International Congress of Environmental Engineering*. February, 21-23, Villahermosa, Tabasco, Mexico.
66. Mas Iwan Konggidinata, Bing Chao, Qiyu Lian, Ramalingam Subramaniam and D. Gang (2017). "Surface Modifications of Ordered Mesoporous Carbons for Adsorption of BTEX from Aqueous Solutions". *Fifth International Conference on Multifunctional Hybrid and Nanomaterials*. March 6-10, Lisbon, Portugal
67. Bing Chao, Lu Lin, Mas Iwan Konggidinata, and D. Gang (2017). "Effect of Carbon Precursors and Pore Expanding Reagent on Ordered Mesoporous Carbon for Resorcinol Removal." *Fifth International Conference on Multifunctional Hybrid and Nanomaterials*. March 6-10, Lisbon, Portugal
68. Gang, D. (2017). "From Disinfection by Products Control to Functional Material Development and Sustainable Design." Nanyang Normal University, Nanyang, Henan Province, PRC. June 19, 2017.
69. Mas Iwan Konggidinata, Bing Chao, William E Holmes, D. Gang, Rakesh Bajpai and Ramalingam Subramaniam (2016). "BTEX Removal from Synthetic Wastewater Using Ordered Mesoporous Carbons (OMCs)." *2016 AIChE Annual Meeting*. November 13-18, San Francisco, CA
70. Dhan Lord Fortela, William Holmes, Emmanuel Revellame, Andrei Chistoserdov,

- Rakesh Bajpai, D. Gang, Mark Zappi and Rafael Hernandez, (2016). “What If We Make Fuel Oil from Our Sanitary Sewage?” *2016 AIChE Annual Meeting*. November 13-18, San Francisco, CA
71. Aditya R Kaveeshwar, William E Holmes, D. Gang, Rakesh Bajpai and Ramalingam Subramaniam (2016). “Removal of Metals Form Industrial Wastewater Using Pecan Shell Based Activated Carbon”. *2016 AIChE Annual Meeting*. November 13-18, San Francisco, CA
72. Bing Chao, Zaki Uddin Ahmad, Dr. Daniel D. Gang (2016). “Molecular Simulation and Validation Studies of Resorcinol Adsorption on Ordered Mesoporous Carbon.” *The Eighth International Conference on Environmental Science and Technology*. June 6 -10, Houston, TX
73. Besse G., Sakib S., Jones B., and Gang, D. (2016). “Laboratory Study of a Novel Marsh Shoreline Protection Device: Sand Collection”. *2016 State of the Coast Conference*. June 1 to 3, New Orleans, LA
74. Sakib S., Besse G., Jones B., and Gang, D. (2016). “Optimization of the Wave Suppression and Sediment Collection (WSSC) System by Computational Fluid Dynamics (CFD) Simulation”. *2016 State of the Coast Conference*. June 1 to 3, New Orleans, LA
75. Besse G., Sakib S., Jones B., and Gang, D. (2016). “Computational Fluid Dynamic Model Validation and Optimization of a Novel Marsh Shoreline Protection Device”. *2016 Data Flow Conference*. May 9 to 10, Baton Rouge, LA 70808
76. McCoy, Nicholas, and Gang, D. (2015). “The Wave Suppression and Sediment Collection (WSSC) System (Wave Robbers™)”. *2015 ASBPA National Coastal Conference*. October 14 to 16, New Orleans, LA
77. Imtiaz U Ahmed, Gang, D.; Mohammad J Khattak, Hashim R Rizvi (2015) “Development and Evaluation of Multi-Functional Open Graded Friction Course (MOGFC) for Heavy Metal Removal from Highway Runoff as an in Situ Treatment” *88th Annual Water Environment Federation Technical Exhibition and Conference*. September 26–30, Chicago, IL
78. Gang, D. (2015). “American Engineering and Technology Accreditation and Assessment.” Beijing Jiaotong University, Beijing, PRC. (June 2015).
79. Gang, D. (2015). “Academic Research Journal Paper Writing.” Wuhan Institute of Technology, Wuhan, PRC. (May 2015).
80. Hanlong, Ren; and Gang, D. (2014). “Modification and Characterization of Ordered Mesoporous Carbons for Resorcinol Removal”. *2014 EPSCoR Advanced Materials and Manufacturing Industry-Academia Workshop*. November 7, New Orleans, LA
81. McCoy, Nicholas, and Gang, D. (2014). “Wave Robbers™: Erosion Control and Land Reclamation: Function Evaluation, Mathematical Modeling, and Sensitivity

- Study". *2014 ASBPA National Coastal Conference*. October 14 to 17, Virginia Beach, VA
82. McCoy, Nicholas, Grant Bess, and Gang, D. (2014). "Wave Robbers™: Erosion Control and Land Reclamation: Preliminary Field Study". *2014 ASBPA National Coastal Conference*. October 14 to 17, Virginia Beach, VA
 83. Shou, Wan; Chao, Bing; and Gang, D. (2014). "Improving Adsorption Capacity of Ordered Mesoporous Carbon (OMC) Through Addition of Crosslink Agent". *2014 TechConnect Word Innovation Conference & Expo*. June 15-18, Washington, DC
 84. Hanlong, Ren; Chao, Bing; and Gang, D. (2014). "Modification and Characterization of Ordered Mesoporous Carbons for Resorcinol Removal". *2014 LaSPACE Council Meeting*. October 4, Lake Charles, LA
 85. Shou, Wan; Ren, Hanlong; Ren, Chong; and Gang, D. (2014). "Synthesis and Characterization of High Ordered Mesoporous Carbon (OMC) Using Polyacrylamide for Resorcinol Removal." *The Seventh International Conference on Environmental Science and Technology*. June 9-13, Houston, TX
 86. Ren, Hanlong; Shou, Wan; Ren, Chong; and Gang, D. (2014). "Synthesis and Characterization of Modified Ordered Mesoporous Carbons for Total Organic Carbon (TOC) Model Compound (Resorcinol) Removal." *The Seventh International Conference on Environmental Science and Technology*. June 9-13, Houston, TX
 87. Gang, D.; McCoy, Nicholas; Leblanc, Scott; and Li, Chunyan (2014). "Wave Robbers™: Erosion Control and Land Reclamation Preliminary Function Evaluation, Field Evaluation, and Design Refinement Study". *2014 State of the Coast Conference*. March 18 to 20, New Orleans, LA
 88. Alam, Rifat; Benson, Barbara; Bari, Ruwaida; and Gang, D. (2014). "Cloud Cover, Water Quality, and Spatial Analysis: Enhancements to a Mechanistic Model of Light Dynamics and Phytoplankton Growth in Little Vermillion Bay". *2014 State of the Coast Conference*. March 18 to 20, New Orleans, LA
 89. Gang, D. (2013). "Selenium (Se) Removal by Adsorption Using Iron-Coated GAC." Chemical Engineering Department Seminar, University of Louisiana at Lafayette, Lafayette, La USA (Sept. 30th 2013)
 90. Gang, D. (2013). "Selenite Removal by Iron-Coated GAC." Huanggang Normal University, Huanggang, Hubei, PRC. (June 18th, 2013)
 91. Jing Nie, Gang, D.; Dufreche, S.; Subramaniam, R.; Bajpai R.; and Zappi, M (2013). "Fenton's oxidation for landfill leachate treatment", *245th American Chemical Society (ACS) National Meeting & Exposition*, April 7 - 11, New Orleans, LA.
 92. Gang, D. (2013). "Selenite Removal by Adsorption using Iron-Coated GAC." Wuhan Institute of Technology, Hubei, Wuhan, PRC. (June 2013)
 93. Jing Nie, Gang, D.; Dufreche, S.; Subramaniam, R.; Bajpai R.; and Zappi, M. (2012).

- “Fenton’s oxidation pretreatment of landfill leachate for biogas production” *VerTech 2012 Conference*. November 6 – 8, Lafayette, LA
94. Gang, D. (2012). “Disinfection by-products (DBPs) and Endocrine Disrupting Chemicals in Water” *2012 American Water Works Association Southwest Section Annual Conference & Exposition*. October 14 – 16, Lafayette, LA
95. Ruixuan Guo, and Gang, D. (2012). “Synthesis and Surface Modification of Ordered Mesoporous Carbons for Resorcinol Removal.” *The Sixth International Conference on Environmental Science and Technology*. June 25-29, Houston, TX
96. Gang, D. (2012). “Chemical Hazardous Waste Treatment - Phytoremediation” Hubei University of Arts and Science, Xiang Yang, Hubei, PRC. (June 2012)
97. Gang, D.; LeBlanc, S.; and Hayes, D. (2012). “Wave Robbers™: Erosion Control and Land Reclamation: Preliminary Function Evaluation and Design Refinement Study”. *2012 State of the Coast Conference*. June 25 to 27, New Orleans, LA
98. Gang, D. (2012). “Phytoremediation.” Wuhan Institute of Technology, Hubei, Wuhan, PRC. (June 2012)
99. Ruixuan Guo, Lu Lin, Victoria Hover, and Gang, D. (2011). “Development and Evaluation of Ordered Mesoporous Carbons for Resorcinol Removal.” *The 41st International Conference on Environmental Systems*, July 17–21, Portland, Oregon
100. Liang Wang, Hashim R. Rizvi, Mohammad J. Khattak, Gang, D. (2011). “Development and Evaluation of Functional Open Graded Friction Courses (FOGFC) Mixtures for In Situ Highway Runoff Treatment.” *Geo-Frontiers 2011 Conference*, March 13–16, Dallas, TX
101. Gang, D. (2011). “Development of Nano-Scale Mesoporous Sorbents for Space Water Recovery Systems (WRS)” Wuhan Institute of Technology, Wuhan, PRC. (June 2011)
102. Dong Yan, Gang, D.; Ning Zhang, Lian-Shin Lin (2010) “Modeling Selenite Breakthrough with the Pore Surface Diffusion Model in Iron Coated Granular Activated Carbon Packed Bed Columns.” *83rd Annual Water Environment Federation Technical Exhibition and Conference*, October 2–6, New Orleans, LA
103. Guo, J; Xiao, L; Lua, AC; Gang, D. (2010) “Activated Carbons Prepared from Biomass Solid Waste and their Applications for Gaseous Pollutant Removal.” *1st Conference on Environmental Pollution and Public Health*, September 10–11, Wuhan, PR CHINA
104. Gang, D. (2010) “Functional Adsorbents Development and its Environmental Applications.” *2010 China-America-Japan-Singapore Symposium on Water and Environmental Safety*, May 20–21, Tsinghua University Shenzhen Graduate School, Shenzhen, PR. China
105. Gang, D. (2010). “Functional Adsorbents Development and Their Environmental

- Applications.” Hebei University of Science and Technology, Shijiazhuang, May, 31st, PRC.
106. Gang, D. (2010). “Development and Evaluation of Functional Open Graded Friction Courses (FOGFC) Mixtures for in Situ Highway Runoff Treatment” Wuhan Institute of Technology, Wuhan, PRC. (May 2010)
 107. Gang, D. (2010). “American Engineering and Technology Accreditation and Assessment.” Wuhan Institute of Technology, Wuhan, PRC. (June 2010).
 108. Ning Zhang, Gang, D.; L.-S. Lin (2009) “Comparison of selenite and selenate adsorption with iron-coated GAC.” *The IASTED International Conference on Environmental Management and Engineering*, July 6-8, Banff, Alberta, Canada
 109. Gang, D. (2009). “Recovery and Removal of Chromium and Arsenic from Mining Waste Water.” South-Central University for Nationalities, Wuhan, July, 1st, PRC.
 110. Gang, D. (2009). “Removal of Selenium (Se) from Coal Mine Wastewater by GAC-Based Iron-Containing Adsorbents.” Wuhan Institute of technology, Wuhan, June, 9th, PRC.
 111. Ning Zhang, Lian-Shin Lin, and Gang, D. (2007) “Evaluation of GAC based Iron-Containing Adsorbents for Selenite Removal”, *234th American Chemical Society (ACS) National Meeting & Exposition*, August 19–23, Boston, MA.
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- Mercury Pollution in West Virginia.” 2006 *American Society for Engineering Education (ASEE) Illinois-Indiana and North Central Joint Section Conference*. March 31–April 1, 2006, Fort Wayne, Indiana
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119. Thomas, G.; Minnick, M., and Gang, D. (2005). “Evolution of a Freshman Software Tools Class.” 2005 *American Society for Engineering Education (ASEE) Annual Conference & Exposition*. June 12-15, 2005, Portland, Oregon
120. Fang, J., Gu, Z.; Deng, B., and Gang, D. (2005) “Evaluation of a Synthetic Adsorbent (GAC-QPVP) for Chromate Removal from Aqueous Solution”, 230th *American Chemical Society (ACS) National Meeting & Exposition*, Aug. 28 to Sept. 1, Washington, DC.
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131. Gang, D.; Segar, R. L.; Clevenger, T. E.; and Banerji, S. K. (2001) "Prediction of TTHM and HAA₉ Formation Based on the Chlorine Demand of Raw and Coagulated Surface Waters". *Annual American Water Works Association Water Quality Technology Conference*, Nov. 11-14, Nashville, Tennessee.
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133. Gang, D.; Banerji, S. K.; and Clevenger, T. E. (2000) "Chromium Removal and Recovery by Modified PVP Coated Silica Gel", *Hazardous Substance Research Centers (HSRC) Research Symposium*, July 9-12, Asilomar, CA.
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135. Gang, D.; Banerji, S. K.; and Clevenger, T. E. (1999) "Chromium (VI) removal by modified PVP coated silica gel". *Annual Conference on Hazardous Waste Research*. May 24 - 27, St. Louis, MO.
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EDITOR AND EDITOR BOARD MEMBER

- Guest Editor, Journal of Hazardous Material (Elsevier Science)

SELECTED REVIEWER FOR PROFESSIONAL JOURNALS

- Applied Surface Science (Elsevier Science)
- Bioresource Technology (Elsevier Science)
- Chemical Engineering Journal (Elsevier Science)
- Chemosphere (Elsevier Science)
- Colloid and Polymer Science (Springer)

- Desalination and Water Treatment (Taylor & Francis)
- Ecological Engineering (Elsevier Science)
- Environmental Engineering and Management Journal
- Environmental Engineering Science (AEESP)
- Environmental Science and Pollution Research (Springer)
- Environmental Science & Technology (ACS)
- Environmental Modeling and Assessment
- International Journal of Environmental Research and Public Health
- Journal of Agricultural and Food Chemistry (ACS)
- Journal of American Water Works Association (AWWA)
- Journal of Environmental Engineering (ASCE)
- Manuscript Reviewer, Journal of Environmental Engineering & Science
- Journal of Hazardous Material (Elsevier Science)
- Journal of Materials Science (Springer)
- Journal of Science of the Total Environment
- Journal of the Air & Waste Management Association
- Journal of Applied Polymer Science (Wiley)
- Journal of the American Chemical Society (ACS)
- Molecules (MDPI)
- Microporous and Mesoporous Materials (Elsevier Science)
- Reactive and Functional Polymers (Elsevier Science)
- Sensors & Actuators: B. Chemical (Elsevier Science)
- Sustainable Chemistry & Engineering (ACS)
- Water Quality Research Journal of Canada
- Water Research (Elsevier Science)
- Water Environment Research (WEF)

UNDERGRADUATE RESEARCH ADVISEES

- 2025 Kory Trosclair (undergraduate research assistant; Mechanical Engineering)
- 2025 Aubrey Tuten (undergraduate research assistant; Civil Engineering)
- 2024 Kory Trosclair (undergraduate research assistant; Mechanical Engineering)

- 2024 Aubrey Tuten (undergraduate research assistant; Civil Engineering)
- 2024 Julia Werther (undergraduate research assistant; Chemical Engineering)
- 2023 William B Briggs (undergraduate research assistant; Civil Engineering)
- 2023 Kory Trosclair (undergraduate research assistant; Civil Engineering)
- 2023 Aubrey Tuten (undergraduate research assistant; Civil Engineering)
- 2023 Julia Werther (undergraduate research assistant; Chemical Engineering)
- 2022 Naomi Cousin (undergraduate research assistant; Mechanical Engineering)
- 2022 Kyle Taylor (undergraduate research assistant; Chemical Engineering)
- 2022 Reece Lacour (NSF REU Program, Howard University; Civil Engineering)
- 2021 Kyle Taylor (undergraduate research assistant; Chemical Engineering)
- 2021 Michael Gee (NSF REU Program, UC Berkley; Civil Engineering)
- 2020 Adam Linden (undergraduate research assistant; Chemical Engineering)
- 2020 Drew Leboeuf (undergraduate research assistant; Civil Engineering)
- 2020 Kyle Taylor (under-graduate research assistant; Chemical Engineering)
- 2019 Drew Leboeuf (undergraduate research assistant; Civil Engineering)
- 2019 Kyle Taylor (under-graduate research assistant; Chemical Engineering)
- 2019 Joshua Broussard (under-graduate research assistant; Civil Engineering)
- 2018 Cutrer Chase (under-graduate research assistant; Civil Engineering)
- 2017 Connor McCarthy (under-graduate research assistant; Civil Engineering)
- 2017 Christopher L Cooper (under-graduate research assistant; Civil Engineering)
- 2016 Alex Williams (under-graduate research assistant; Civil Engineering)
- 2016 Austin Aucoin (under-graduate research assistant; Petroleum Engineering)
- 2016 Wenqiongzi Yin (under-graduate research assistant; Chemical Engineering)
- 2015 Brant Jones (under-graduate research assistant; Petroleum Engineering)
- 2015 Wenqiongzi Yin (under-graduate research assistant; Chemical Engineering)
- 2014 Kristopher Charpentier (under-graduate research assistant; Civil Engineering)
- 2014 Michael Kimmey (under-graduate research assistant; Civil Engineering)
- 2013 Nick McCoy (under-graduate research assistant; Civil Engineering)
- 2013 RoShan Sharma (under-graduate research assistant; Civil Engineering)
- 2013 Leonard Chauvin (under-graduate research assistant; Civil Engineering)
- 2013 Kristoper Charpentier (under-graduate research assistant; Civil Engineering)

2013 Michael Kimmey (under-graduate research assistant; Civil Engineering)

UNIVERSITY SERVICE

University of Louisiana at Lafayette

2024-present Chair, Civil Engineering Department Scholarship Committee
2021 Member, Master's Mentor Awards Selection Committee
2021- present Member, Civil Engineering Department Graduate Committee
2011- 2021 Chair, Civil Engineering Department Graduate Committee
2009- present Member, Environmental Engineering Specialty Minor Committee
2015- present Academic Advisor, Undergraduate Apprenticeship Program
2016- present Member, Coastal Engineering Specialty Minor Committee
2017- present Research fellow, Institute for Coastal & Water Research
2018- present Ph.D. Executive Committee, College of Engineering
2015- 2017 Board Member, Institute for Coastal & Water Research Advisory
2017 Member, Chemical Engineering Faculty Search Committee
2016 Faculty Mentor, Senior Capstone Design Project for the St. Landry Parish Solid Waste Disposal District.
2016 Member, Environmental Engineering Faculty Search Committee
2016 Member, Inst. of Mate. and Res. Innovations Director Search Committee
2016 Member, Chevron Endowed Professorship Screening Committee
2015-2016 Member, ICaWR Director Search Committee
2015-2016 Member, Faculty Senate Governmental Concerns Committee
2013-2016 Member, Faculty Senate
2015 Member, Department Tenure and Promotion Committee
2011-2014 Member, College of Engineering Academic Affairs Committee
2011-2014 Member, ICEE Director Search Committee
2011-2014 Member, UL Committee on Academic Affairs and Standards
2010-2014 Member, Faculty Grievance Committee
2012-2013 Member, ABET Review Committee
2012-2013 Member, ABET Outcome Assessment Committee
2011-2012 Member, UL Graduate Council, Graduate Curriculum Committee
2011-2012 Member, College of Engineering Academic Affairs Committee
2011-2012 Member, Faculty Senate Governmental Concerns Committee

2010-2013	Faculty Advisor, Chinese Students and Scholars Association (CSSA) of UL
2010-2012	Member, Faculty Senate
2010-2012	Co-Chair, UL-WIT Cooperation Ad-hoc Committee
2009-2010	Faculty Team Member, UL Beausoleil Home
2008	Member, Department Tenure and Promotion Committee
2007	Member, ABET Outcome Assessment Committee
2007-2011	Member, Undergraduate Curricula Committee
2007-2011	Member, Department Resources Committee

West Virginia University Institute of Technology

2005-2006	Chair, Water Resources Faculty Search Committee
2005-2006	Member, ABET Outcome Assessment Committee
2005-2006	Member, ABET Review Committee
2006-2007	Member, Faculty Status Committee
2004-2005	Member, Civil Engineering Chair Search Committee
2006-2007	Member, Academic Appeals Committee
2006-2007	Member, Research Committee, member
2005	Member, Tech R&D Assessment Committee
2006-2007	Member, Transportation Faculty Search Committee
2005-2006	Member, Geotech Faculty Search Committee
2005-2007	Member, Structure Faculty Search Committee
2003-2007	Member, Graduate Committee

RESEARCH PROJECTS IN PROGRESS OR COMPLETED

Projects in Functional Adsorbents Development and Environmental Applications

1. Synthesis and Characterization of Novel Functionalized Ordered Mesoporous Carbon (OMC) for Resorcinol and Sunset Yellow Removal.
2. Functionalized Mesoporous Sorbents Development for Hydraulic Fracturing Flowback Water Treatment
3. Novel Multifunctional Open Graded Friction Courses (MOGFC) Development for In-situ Highway Runoff Treatment

4. Development and Evaluation of Nano-Scaled Mesoporous Sorbents for Space Environmental Control and Life Support System (ECLSS)
5. Novel Hydrophobic Silica Adsorbent Development for in Situ Burning of Oil Spills from Sea Water
6. Nano-Scale Mesoporous Sorbents (NSMS) Development for Space Lightweight Contingency Water Recovery Systems (LWC-WRS)
7. Novel Sorbent Development for Space Missions and International Space Stations Water Recovery Systems
8. GAC-Based Iron-Containing Adsorbents Development for Selenium (Se) Removal from Coal Mine Wastewater
9. Reactive Polymer Coated Absorbents for Chromium and Arsenic Removal and Recovery from Toxic Waste Stream
10. Iron Based Chitosan Adsorbent Development for Arsenic Removal from Acid Mine Drainage (AMD)
11. Functionalized Ordered Nano-porous Carbons (FONCs) Development for Mercury Reduction from Coal Power Plant Emission
12. Modified Poly(4-vinylpyridine) (PVP) Coated Silica Gel Adsorbent Development for Chromium (VI) Removal from Aqueous Solution

Projects in Environmental Engineering Areas Associated with Energy Industries

13. Functionalized Mesoporous Sorbents Development for Hydraulic Fracturing Flowback Water Treatment
14. Hydrophobic Silica Sorption and In Situ Catalytic Burning of Oil Spills
15. Evaluation of Advanced Anaerobic Digester Technology for Distributed Power Generation
16. Coupling Bioreactors with Manufacturing Processes to Reduce Carbon Footprint.
17. Mercury Reduction from Coal Power Plant Emission Using Functionalized Ordered Nano-porous Carbons (FONCs)
18. Low-Maintenance Biofilter Development for Mine Influenced Water (MIW) Treatment and Metal Recovery
19. Removal of Selenium (Se) from Coal Mine Wastewater by GAC-Based Iron-Containing Adsorbents
20. Recovery of Chromium and Arsenic from Toxic Waste Stream By Reactive Polymer-Coated Absorbents

21. Arsenic Removal form Acid Mine Drainage (AMD) Using Iron Based Chitosan Adsorbent

Projects in Coast Restoration Area

1. Optimization Design of the Wave Suppressor Sediment Collection (WSSC) System through Computational Simulation Study
2. Field Investigation of the Wave Suppressor Sediment Collection (WSSC) System, a Highly Effective System for Shoreline Protection and Sediment Retention
3. Modular Sediment Retention and Shoreline Protection Structure
4. Coastal Protection and Restoration Field Study Using Wave Suppressor Sediment Collection (WSSC) System
5. Dredging Sediment Residuals Quantification

Projects in Drinking Water Quality Area

6. Modeling THMs and HAAs formation upon chlorination
7. On site prediction of TTHM and HAA₅ formation based on the chlorine demand model
8. The effects of dissolved organic carbon (DOC) structure on the HAA/TTHM –ratio
9. TTHM & HAA₉ formation in ultrafiltration NOM fraction waters
10. Fate and transport of nitroso-dimethylamine (NDMA) in drinking water distribution systems
11. Chlorine decay modeling
12. Mechanisms and kinetics of NDMA formation in drinking water
13. Evaluation of conventional treatment processes for removal of nitrosodimethylamine (NDMA) from drinking water
14. Impact of endocrine disruptors (EDs) on drinking water systems

Projects in Wastewater Area

15. Landfill Leachate Treatment by Fenton's oxidation
16. Development of Nano-Scale Mesoporous Sorbents (NSMS) for Space Lightweight Contingency Water Recovery Systems (LWC-WRS)
17. Development and evaluation of Functional Open Graded Friction Courses (FOGFC) materials for in situ highway runoff treatment
18. Modeling nitrate-nitrogen removal process in first-flush reactor for stormwater treatment

19. Novel Sorbent Development for Space Missions and International Space Stations Water Recovery Systems
20. Chromium (VI) removal using synthesized PVP coated silica gel
21. WHE-1 flocculent preparation and application in treatment papermaking, electroplating, and mineral processing wastewaters

Projects in Air Pollution Control Area

1. Catalytic oxidation of elemental mercury using nano-titanium dioxide
2. Mercury Reduction from Coal Power Plant Emission Using Functionalized Ordered Nano-porous Carbons (FONCs)

TEACHING

Graduate Courses

University of Louisiana at Lafayette

CIVE 663 (3 hr) Solid and Hazardous Waste Management (PhD level)

Current issues and legislation. Collection, storage and disposal. Treatment technologies including incineration and sanitary and hazardous waste landfills.

CIVE 661 (3hr) Physicochemical Treatment Processes (PhD level)

Fundamental principles, analysis, modeling, and design of physical and chemical process that influence water quality in engineered and natural systems. Covers material balances, transport phenomena, reaction kinetics, reactor theory, sedimentation/Flotation, adsorption, membrane separation and advanced oxidation processes.

CIVE 591 (1 hr) Graduate Seminar (PhD/MS level)

CIVE 563 (3 hr) Solid and Hazardous Waste Management (MS level)

Current issues and legislation. Collection, storage and disposal. Treatment technologies including incineration and sanitary and hazardous waste landfills.

CIVE 561 (3 hr) Physicochemical Treatment Processes (MS level)

Fundamental principles, analysis, modeling, and design of physical and chemical process that influence water quality in engineered and natural systems. Covers material balances, transport phenomena, reaction kinetics, reactor theory, sedimentation/Flotation, adsorption, membrane separation and advanced oxidation processes.

CIVE 497 (3 hr) Special Topics ((senior/graduate level)

CIVE 460 (3 hr) Waste Water Treatment (senior/graduate level)

Pollutants of importance; design approach; pretreatment; primary, secondary, tertiary treatment alternatives; biological process design; sludge characterization and treatment. Wastewater treatment and collection system technical management.

University of Missouri

Cv Eng 492 Physical-Chemical Treatment Processes (graduate level)

Undergraduate Courses

University of Louisiana at Lafayette

CIVE 422 (3hr) Environmental Engineering II (senior/graduate level)

Physical, chemical, and biological treatment of water and wastewater treatment units. Examination of water and wastewater quality.

CIVE 422 (1 hr) Environmental Engineering II Laboratory (senior/graduate level)

CIVE 322 (3 hr) Environmental Engineering I (junior level)

Mass transfer, environmental chemistry, mathematics of growth, water pollution, risk assessment, water and wastewater treatment, air pollution, global atmospheric change, and hazardous and municipal solid wastes management; laboratory examination of water and wastewater quality.

CIVE 322 (1hr) Environmental Engineering I Laboratory (junior level)

CIVE 101 (1 hr) Introduction to Civil Engineering (freshman level)

Introduction to the technical practice areas, professional requirements, history and ethics of civil engineering.

West Virginia University Institute of Technology

CVLE 453 (3 hr) Civil Engineering Project (senior level)

CVLE 435 (3 hr) Solid Waste Management (senior level)

CVLE 434 (3 hr) Advanced Sanitary Engineering (senior level)

CVLE 432 (3 hr) Sanitary Engineering (junior level)

CVLE 432 (1 hr) Sanitary Engineering Laboratory (junior level)

CVLE 431 (3 hr) Hydraulic Engineering (junior level)

CVLE 431 (1 hr) Hydraulic Engineering Laboratory (junior level)

CVLE 491 (3 hr) Civil Engineering Research (senior level)

GENE 111 (3 hr) Software Tools for Engineers (freshman level)

CHEM 461 (3 hr) Principles of Environmental Chemistry (junior level)